DRAFT GENERIC ENVIRONMENTAL IMPACT STATEMENT (DGEIS)

FOR

Adoption of Zoning Code

for the

Village of Mastic Beach

INCORPORATED VILLAGE OF MASTIC BEACH, TOWN OF BROOKHAVEN
SUFFOLK COUNTY , NEW YORK
NP&V #13017

SEQRA Classification:	Type I Action
Lead Agency:	Board of Trustees Incorporated Village of Mastic Beach
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Accepted June 5, 2013

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Date the DGEIS was accepted by the Lead Agency: ***June 5th, 2013***

Written comments on the DGEIS are to be submitted to the Lead Agency by: ***4:00pm on July 15th, 2013***

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SUMMARY

SUMMARY

This document is the Draft Generic Environmental Impact Statement (DGEIS) for the **Adoption of Zoning Code for the Village of Mastic Beach** (hereafter, the proposed action). The Board of Trustees of the Incorporated Village of Mastic Beach (hereafter, the Village Board) is proposing to replace the village's existing zoning code (which duplicates the Town of Brookhaven's zoning code, and was adopted on an interim basis when the Village of Mastic Beach was established in 2010) with its own zoning code. The proposed action involves only a change in the Village of Mastic Beach Zoning Code, which is a legislative act with no site-specific development proposals or physical changes proposed within the village.

A DGEIS was required by the Village Board as "lead agency" designated pursuant to the New York State Environmental Quality Review Act (SEQRA). In that capacity, the Village Board finds that a DGEIS is needed to address potential significant adverse environmental issues, has issued a Positive Declaration, and elected to conduct formal scoping pursuant to Title 6, New York Code of Rules and Regulations (6 NYCRR) Part 617.8.

This DGEIS provides the Village Board and the Suffolk County Planning Commission ("SCPC") as an involved agency with information necessary to render informed decisions on the proposed action. Once accepted by the lead agency, this document will be subject to public review and written comments, followed by preparation of a Final GEIS (FGEIS) responding to any and all substantive comments. Upon completion of the FGEIS, the Village Board will be responsible for the adoption of a Statement of Findings. This will complete the SEQRA review process for the proposed action, enabling the SCPC and the Village Board to render their decisions on the proposed action.

Background, Need, Objectives and Benefits of the Proposed Action

Project Background

The Village of Mastic Beach had been a hamlet within the Town of Brookhaven until November 2010, at which time it incorporated as a village. The reason that the village's residents sought to establish their government was related to the desire to enact and implement their own land use decisions, to remedy the disconnect between the village's zoning districts and the actual pattern of land uses in the village, to protect and preserve their community identity, and to obtain the authority to guide their future development.

The proposed zoning code for the village was drafted by the Village Zoning Commission, and has been subject to multiple public sessions open for public input. The Village Zoning Commission issued the final proposed code in January 2013, and it is now being considered by the Village Board of Trustees for adoption. This GEIS is designed to analyze the proposed action and its potential impacts, so that the community and village have a thorough understanding of it, and the Village Board can make an informed decision.

Public Need and Village Objectives

The public interest and village goal is to obtain local control of the future development of Mastic Beach

for the residents of Mastic Beach. This was the primary motivation for the creation of the village in 2010. Consequently, it became necessary for the new village to establish its own Zoning Code (beyond the Town's Zoning Code used on an interim basis), to establish a framework by which this goal was to be achieved. The proposed action represents the next logical and necessary step to achieve this objective.

As stated in the Final Draft Zoning Code (which is designated Chapter 530 of the Village Code), the following expresses the village's purpose of the proposed action.

A. To guide and regulate the orderly growth, development and redevelopment of the Village of Mastic Beach in accordance with the more general long-range objectives which are deemed beneficial to the interests and welfare of the people.
B. To protect the established character and the social and economic well-being of both private and public property.
C. To promote, in the public interest, the utilization of land for the purposes for which it is most appropriate.
D. To promote, in the public interest, the preservation of prime natural areas.
E. To secure the maximum recharge of the Village of Mastic Beach's fresh groundwater reservoir through protection of the natural environment and watershed areas.
F. To protect the healthful biological and chemical balance in the adjacent bays, estuaries and all tributary watercourses and drainage lines.
G. To secure safety from fire, panic, flood, storm and other dangers; to provide adequate light, air and convenience of access; and to prevent environmental pollution.
H. To prevent overcrowding of land or buildings and to avoid undue concentration of population.
I. To conserve the value of buildings and to enhance the value of land throughout the Village of Mastic Beach.
J. To provide housing sites for residents of the community compatible with their economic means.
K. To lessen and, where possible, to prevent traffic congestion on public streets and highways.
L. To eliminate nonconforming uses gradually.
M. To conserve and reasonably to protect the natural scenic beauty and cultural and historic resources of the Village of Mastic Beach and its environs.

By way of the proposed action, Mastic Beach seeks to establish the statutory framework necessary to achieve their goal of controlling the growth and character of their community. The proposed Village Zoning Code is that framework.

Benefits of the Proposed Action

The primary benefit to the Village of Mastic Beach will be to give the village control over its future using development controls designed by the village that are based on village conditions. This benefit will be realized by the following:

- the new Zoning Code has been prepared by a village entity composed of village residents, so that it would reflect the goals and desires of the village to a better degree than was possible under the prior, interim code, which was the Town Zoning Code;
- the new Zoning Code will remove the existing non-conformity between the village's zoning districts and the land uses that exist in the village, so that these characteristics will be rationalized and development controls applied to future growth will be consistent with actual land use

patterns;

- the new Zoning Code has been designed based upon existing village development conditions and land use patterns, so that future growth would more accurately reflect village-wide growth goals than would otherwise result from a Town-based Village Zoning Code; and
- the new Zoning Code will enable future growth to better conform to/complement existing development into which growth must fit; this ability will provide for a better and more attractive land use pattern and village-wide aesthetic than would otherwise be possible.

Location of the Proposed Action

The Incorporated Village of Mastic Beach is located in the southern portion of the Town of Brookhaven, along the northern shores of Narrow Bay and Moriches Bay. The village is approximately 2,423 acres in size, of which approximately 2,077 acres are dry land and therefore subject to zoning. As the proposed action would change the names and standards of all of the village's zoning districts, the proposed action applies to the entire zoned acreage of the village.

At the present time under the Town zoning, the village is zoned overwhelmingly for low-density residential use, with much lower amounts of land set aside for business use. The village is primarily zoned A-Residence-1 (A-1), which provides for detached single-family homes on lots of at least 40,000 square feet (SF) in size. The large majority of these sites are already developed with homes on lots much smaller in size than 40,000 SF, hence, the village seeks to rezone these areas to conform with the existing pattern of development. A-2 zoning is the second-most represented zone in the village, and also is intended for detached homes on lots having at least 80,000 SF. Together, these two zones represent 95% of the acreage of the village; in fact, detached single-family residential zoning represents over 96% of the Village. Business zonings are limited in area and location, to a total of about 49 acres, found primarily along Commack Road/Mastic Road and Neighborhood Road, with smaller areas at Neighborhood Road/Lakeview Drive and at the end of Private Road, in Old Mastic. Finally, there are an estimated 13 acres of Planned Retirement Community zoning near the intersection of Peeker Street and Mastic Beach Road; this zoning is consistent with the existing retirement community use. As noted above, the pattern of land uses in the village does not fully conform to the existing zoning. These sites are *"grandfathered"* uses as they continue to exist but do not conform to existing zoning. A goal of the proposed action is to make these uses consistent with the new village zoning.

Description of the Proposed Action

The existing village zoning consists of the nine Town zoning districts that were represented within the village when it was established in 2010. Under the current code, the majority of the lots in the village do not conform to their respective zoning district requirements. The proposed zoning code was developed to better reflect the existing land use, density and dimensional characteristics of parcels within the village, as well as to encourage orderly development consistent with the vision of the village. It is noted that no specific development proposals are considered by the proposed action; rather, the proposed action is limited to the establishment of a new zoning code for the village.

A comparison of the uses allowed currently and proposed indicates that the new village zoning is intended to eliminate a number of uses that do not apply to the conditions of the village (e.g., farming), and to provide opportunities to located other uses within areas of the village that appear to be suited to site

specific conditions (i.e., creating a Waterfront District in which to locate water-dependent uses, like marina and boat/yacht clubs).

Under the proposed zoning code, the following nine districts are proposed:

- *R-1 Residence District:* this district, which will dominate the village, rationalizes the existing small-lot residential use that occupies the majority of the village.
- *R-2 Residence District:* the intent of this district is to provide for the existing low-density (i.e., large lot) residential development that is the second-largest land use type in the village.
- *RH Retirement Housing District:* this district addresses the existing PRC sites and need for additional senior, retirement-age residential projects on appropriately located sites in the village.
- *R/B Residence/Business District:* this zoning category will provide for mixed residential and business uses (e.g., doctor, dentist, accountant, lawyer, etc.) professional home/office space.
- *B-1 Business District:* this district is intended to provide for commercial uses that occupy smaller structures (hence the small minimum lot size required), that would serve a local customer base, such as those found in a downtown village setting.
- *B-2 Business District:* similar to the B-1 district, the B-2 zone would address the commercial needs of a local customer base, but occupying larger lots with larger buildings.
- *I Industrial District:* this district has similar lot size and lot coverage requirements as the B-2 zone, but would provide for light industrial uses.
- *WD Waterfront District:* this district is intended to provide for the types of development that are appropriate for and/or enhanced by a location on the water, such as a restaurant or marina.
- *X Business District:* this is a "floating" district, not designated for a particular site, but may be applied in any location where the Village Board may deem a specific commercial application appropriate, in consideration of adjacent and nearby land uses, proximity to infrastructure and nature of potential impacts.

Tables S-1a and S-1b below summarize and compare the dimensional regulations of the existing and proposed zoning districts, respectively. As can be seen, the new Village Zoning Code reduces the number of residential use-only zones from four to two, and reduces the minimum lot size requirements in those new zones to reflect the small lot sizes that currently exist in the village. The range of lot sizes under current zoning is from as large as 400,000 SF to as small as 40,000 SF. However, actual lot sizes in the village are much smaller, so that the new Code will allow for lots of either 80,000 SF or 7,500 SF. With regard to business zones, the existing four zones will be reduced to two zones, with the B-1 zone utilized in hamlet center locations (where consumer uses are expected on smaller lots), and the B-2 zone found on larger lots for uses that would be expected outside the hamlet downtown area. The new Code acknowledges the need for mixed residential and business uses in a single structure in the hamlet center, with the R/B district; such a zone type had not been available previously.

The new Code also provides specifically for waterfront-related uses, with the proposed WD district. This district would be attractive for water-related and -enhanced uses such as bed-and-breakfast sites, marinas, boat/yacht clubs, and the like.

The proposed action will also reduce the height that buildings may attain, particularly in the business zones, so that potential adverse impacts on the visual character of the village would be reduced, and its rural/suburban appearance would be preserved.

There are 7,579 discrete properties in the village totaling about 2,423 acres, all of which will be subject to rezoning by the proposed action. There are a total of 37 distinct zoning changes to be undertaken by the proposed action that will affect these 7,579 properties/2,423 acres. The majority of these zone changes will be to change the zoning of 6,687 parcels from A-1 to B-1; this will affect 1,593 acres, or over 65% of the village.

Table S-1a
SUMMARY OF ZONING STANDARDS
Existing Conditions

Zone	**Building Height**	**Minimum Lot Area** (SF)	**Minimum Lot Width** (feet)	**Minimum Front Yard Setback** (feet)	**Minimum Side Yard** (feet)	**Minimum Total Side Yard** (feet)	**Minimum Rear Yard** (feet)	**Building Area** (% of lot)
A-1	35 feet, 2.5 stories	40,000	150	50	25	75	60	15
A-10	35 feet, 2.5 stories	400,000	400	80	40	90	85	3
A-2	35 feet, 2.5 stories	80,000	200	60	30	80	75	15
A-5	35 feet, 2.5 stories	200,000	300	70	35	85	80	6
J	35 feet, 2.5 stories	15,000	100	40	10	n/a	40	FAR* of 20%
J-2	50 feet, 3 stories	4,000	40	15	n/a	n/a	20	50
J-5	1 story	20,000	150	50	50	n/a	50	25
J-6	30 feet, 2 stories	n/a	100	40	12	n/a	35	30
PRC	35 feet, 2.5 stories	10 acres	n/a	30	30	n/a	30	20

* FAR - Floor Area Ratio.

Build-Out Analysis of Existing and Proposed Zoning

As noted above, the proposed action is the adoption of a Village Zoning Code. As such, this effort will create the regulatory conditions under which future development in the Village of Mastic Beach will be guided, so that the village's goals can be achieved. The proposed action does not, in and of itself, include any site-specific development applications. In fact, few or no such applications are anticipated to result from approval of the proposed action, as much of the village is already developed and so is unlikely to be redeveloped, at least in the short term.

It is noted that much of the village is already developed; however, a number of vacant sites remain. There would be nothing preventing the owners of developed sites from redeveloping their properties if the proposed action were adopted. Thus, there are a number of sites that could realistically experience development and/or redevelopment subsequent to the proposed action. These are referred to as "*soft sites*". Then, a realistic estimate of the potential development of these soft sites, known as a "build-out", is performed. For purposes of impact analysis in this DGEIS (and as required by SEQRA), the potential

impacts of the build-outs of the soft sites are analyzed herein under both their existing and proposed zonings.

Table S-1b
SUMMARY OF ZONING STANDARDS
Proposed Action

Zone	Building Height	Minimum Lot Area (SF)	Minimum Lot Width (feet)	Minimum Front Yard Setback (feet)	Minimum Side Yard (feet)	Minimum Total Side Yard (feet)	Minimum Rear Yard (feet)	Building Area (% of lot)
R-1	30 feet, 2 stories (1)	7,500	75	30 (2)	15	30	25	35
R-2	35 feet, 2 stories (3)	80,000	150	60 (4)	30	80	75	15
RH	35 feet, 2.5 stories (7)	348,480 (8 acres)	200	25 (5)	50 (6)	n/a	n/a	FAR of 30%, density of 4 units/acre
R/B	30 feet, 2 stories (1)	10,000	100	30 (2)	15	30	25	35
B-1	35 feet, 2.5 stories (3)	10,000	80	5 (8)	n/a	n/a	15	75
B-2	35 feet, 2.5 stories (3)	20,000	100	25 (2)	n/a	n/a	30	35
X	35 feet, 2.5 stories (3)	20,000	100	25	n/a	n/a	25	35
I	35 feet, 2.5 stories	20,000	100	30	25	n/a	30	35
WD	35 feet, 2 stories (3)	10,000	80	30	20	10	25	40

(1) Except in a Flood Damage Prevention Zone, in which case the maximum height shall not exceed 35 feet.
(2) Except for existing permitted structures on the same side of a street, where 40% of the street between the two nearest intersections has at least 2 structures, the average front yard setback for the existing structures is used. A maximum setback of 40 feet is permitted.
(3) Except in a Flood Damage Prevention Zone, in which case the maximum height shall not exceed 40 feet.
(4) Except for existing permitted structures on the same side of a street, where 40% of the street between the two nearest intersections has at least 2 structures, the average front yard setback for the existing structures is used. A maximum setback of 60 feet is permitted.
(5) Planning Board may approve up to 75 feet for front yard setback.
(6) Planning Board may approve a reduction in side yard to 25 feet based on nature and character of development within 500 feet of the parcel.
(7) Planning Board may approve a maximum height of 50 feet and/or 3 stories, whichever is less.
(8) Except for existing permitted structures on the same side of a street, where 40% of the street between the two nearest intersections has at least 2 structures, the average front yard setback for the existing structures is used. A maximum setback of 10 feet is permitted.

Analysis contained in this document indicates that there are 92 soft sites, encompassing 22.84 acres. **Table S-2** summarizes the build-out uses and yields under both the existing zoning and the proposed zoning. The summary data shows that the proposed zoning would yield 4 residences, 38,775 SF of commercial space and 3,526 SF of industrial space more than the existing zoning would yield.

Table S-2
COMPARISON OF USES AND YIELDS OF SOFT SITES
Existing Zoning vs. Proposed Action

Use	**Anticipated Yields** (estimated)	
	Per Existing Zoning	Per Proposed Zoning
Commercial Space	175,817 SF	214,592 SF
Industrial Space	0 SF	3,526 SF
Residences	25	29

Table S-3 presents a comparison of a number of characteristics and impacts of the two development scenarios, and quantifies the differences of each. Note that the differences in yields and impacts between the existing zoning and the proposed zoning are the basis on which the resource impact discussions (in **Sections 2.0 and 3.0**) are presented.

This analysis assumption ensures that the review of the proposed action and its anticipated impacts is not improperly segmented under SEQRA, and also provides the village the ability to establish guidelines as to when further SEQRA review is appropriate, based on conditions and thresholds to be established in the Village Board's Statement of Findings.

Table S-3
ANTICIPATED CHARACTERISTICS AND IMPACTS OF BUILD-OUT COMPARING EXISTING/PROPOSED ZONING

Parameter	Existing Zoning	Proposed Zoning	Difference
Commercial Space	175,817 SF	214,592 SF	+38,775 SF
Industrial Space	0 SF	3,526 SF	+3,526 SF
Residences	25	29	+4
Residents (1)	77	89	+12
School-Age Children (2)	18	21	+3
Employees (3)	230	285	+55
Water Use (4)	25,082	30,300	+5,218
Vehicle Trip Generation (vph):	---	---	---
Weekday AM Peak Hour	245	279	+34
Weekday PM Peak Hour	960	1,101	+141
Saturday Peak Hour	1,269	1,443	+174
Property Taxes ($/year)	809,913	995,706	+185,793
School District Taxes ($/year)	586,423	720,947	+134,524
School District Costs ($/year) (5)	252,258	294,301	+134,524
Net School District Fiscal Impact	+$334,164/year	+$426,646/year	+$92,482/year
Minimum Parking Spaces Required	1,242	1,504	+262

(1) Assuming 3.06 capita/unit.
(2) Assuming 0.71 school-age children/unit.
(3) Assuming 1.305 employees/1,000 SF of commercial or industrial space.
(4) Assuming SCDHS rates for wastewater: average of 0.10 gpd/SF for commercial, 0.04 gpd/SF for industrial and 300 gpd/unit for residences.
(5) Assuming $14,014/student annual expenditures, blended.

Anticipated Impacts and Proposed Mitigation

Topography

Anticipated Impacts
Adoption of the proposed action is a regulatory action and would not result in any physical changes to the village; therefore, no impact to topographic resources would occur.

The difference between the yields of the existing and proposed zonings is that the proposed zoning would result in 4 more residences, 38,775 SF of commercial space and 3,526 SF of industrial space. Given the current topographically flat and developed nature of the majority of the village, there is little difference between the amounts of grading that would result from the two development scenarios. Either development scenario would result in localized impacts to topographic resources in the village, from excavations for building foundations and utility connections and systems, and for roadway foundations and parking areas. However, due to the low relief of the village, and absence of natural topographic features, major grading operations (cut and fills) are not anticipated to be necessary for land use and development which may occur over time in conformance with zoning.

Proposed Mitigation
- Subdivision, site plan and building permit review will be performed as appropriate in connection with proposed use of land.
- Site-specific land use applications will undergo SEQRA review under 6 NYCRR Part 617.
- Erosion control and construction phasing plans will be prepared for site-specific developments during land use application and permit review (as appropriate and necessary), that will specify the methods to be utilized during construction to control transport of sediment and stormwater runoff.

Surface and Subsurface Soils

Anticipated Impacts
Surface Soils - Adoption of the proposed action is a regulatory action, and so would not result in any physical changes to the village, and so no impact to soil resources would occur.

Either development scenario would result in impacts to soil resources but, given the developed nature of the village, significant levels of impact to surface soils from grading are not expected from this amount of development. That is, there is no significant difference between the amounts of grading that would result from the two development scenarios, so that there would be no significant difference in the associated impacts to soil resources.

Subsurface Soils - Adoption of the proposed action is a regulatory action, and so would not result in any physical changes to the village, and so no impact to subsurface soil resources or subsurface conditions would occur.

Either development scenario would result in impacts to subsoils, from excavations for building foundations and utility connections and systems, and for roadway foundations and parking areas. However, due to the relatively small difference in yields of the two scenarios, there would be little difference between the impacts.

A relatively low level of impact to subsurface soils would occur from excavations for building foundations, roadbeds, parking lots, utility trenches, and the like. In addition, the low relief of the village and shallow depth to groundwater, particularly in the southern portions of the village (less than 5 foot in elevation), would tend to minimize the depth of such excavations and grading, so that significant impacts on subsurface soils are not expected.

As construction design generally provides for the on-site reuse of excess soil material for fill (in order to minimize the cost of removal/disposal as well as impacts from removal operations), the total amount of excess soil that must be removed from construction sites would be minimized. This would minimize the potential for adverse dust impacts on neighboring sites, and for noise, dust and traffic-related impacts on roadways due to truck movements.

Proposed Mitigation

- Test borings and test holes will be completed in the early stages of review to determine subsoil characteristics. Agency review during the subdivision, site plan and building permit plot plan approval process will assist in ensuring that site-specific conditions are addressed.
- If unsuitable subsoils are found, techniques including deep compaction or over-excavation and replacement of unsuitable fill materials may be utilized. Development areas would be stabilized, as determined by a Geotechnical Engineer, prior to construction of structural elements.
- Erosion control and construction phasing plans will be prepared for individual site developments during site plan review that will specify the methods to be utilized during construction to control transport of sediment and stormwater runoff.
- Prior to the initiation of construction activities, remediation of sites where recognized environmental conditions have been identified will be necessary. Remediation activities are required to be completed according to the protocols, procedures, standards and documentation requirements of the appropriate supervising entity, such as SCDHS and/or NYSDEC.
- Site-specific land use applications will undergo SEQRA review under 6 NYCRR Part 617.

Groundwater and Surface Water

Anticipated Impacts

Groundwater - Adoption of the zoning changes of the proposed action is a regulatory action, and so would not result in any physical changes to the village, and so no direct impact to groundwater resources would occur.

As development occurs under either existing or proposed zoning, the amount of stormwater runoff generated would be increased from its current volume, and consequently, the volume of recharge reaching the water table would be increased.

The difference between the yields of the existing and proposed zonings is that the proposed zoning would result in 4 more residences, 38,775 SF of commercial space and 3,526 SF of industrial space. As the village is mostly developed, there would be little difference between the recharge volume and nitrogen concentration in recharge between conditions associated with build-out under current zoning as compared with build-out under proposed zoning.

As a result of SCSC Article 6 regulations, there are limitations on the amount and type of development that can occur without sewage treatment. Since sewage treatment is not expected to be available, this

limits the build-out of Mastic Beach, with or without the proposed zoning. The build-out analysis did consider the land use implications of Article 6 of the SCSC. Given that any new development or redevelopment must conform to Article 6, significant adverse impacts to groundwater are not expected.

Public Water Supply - Adoption of the zoning changes of the proposed action is a regulatory action, and so would not result in any physical changes to the village, and so no impact on the public water supply system would occur.

As indicated in the SCWA's 2012 Drinking Water Quality Report, no significant adverse water quality impacts to the groundwater supplied to the village's consumers have been detected. New construction associated with either the existing zoning or the proposed zoning will be required to conform to all applicable requirements for sanitary and drainage system design and operation, and so no impacts to groundwater quality are anticipated. In addition, the difference in the yields of the two scenarios would not be large enough to significantly impact the ability of the SCWA to properly serve its existing customer base, while serving this new development. As a result, no significant adverse impacts to the public water supply are expected.

Surface Water - Adoption of the proposed action is a regulatory action, and so would not result in any physical changes to the village, therefore, no impact to surface water resources would occur.

The incremental amount of development would increase the amount of impervious surfaces in the village, due to the increased acreages of buildings and paved surfaces. As a result, the amount of stormwater runoff generated would be increased from its current volume. This new development will require that each drainage system be designed to accommodate all runoff generated on that site. Given the requirements for on-site drainage retention and treatment of stormwater runoff, it is anticipated that positive impacts to surface water quality would occur through the reduction of discharges that may impact down-gradient wetlands or surface waters of Narrow Bay, Moriches Bay or the creeks and inlets of those bodies. These system designs will be subject to the review and approval of appropriate village and/or county engineering staff, ensuring that significant adverse impacts from stormwater runoff would not occur.

Water Resource Plans - Adoption of the zoning changes of the proposed action is a regulatory action, and so would not result in any physical changes to the village, and so no impact to the various water resource plans would occur.

Land use under either existing or proposed zoning would conform to the recommendations of the Long Island Comprehensive Waste Treatment Management Plan (the "208 Study"), as such development will conform to SCSC Article 6 requirements for sanitary wastewater, and to applicable village and/or county requirements for stormwater runoff. As such, the difference in yields between the two development scenarios would not lead to significant impacts to this water resources plan.

A review of the Nationwide Urban Runoff Program (NURP) Study was conducted to assess the impact that may occur on groundwater quality underlying the village. None of the parameters examined in the NURP Study exceeded standards for the reported constituents with the exception of turbidity. However, the level of this parameter is not expected to have a significant impact on the village, as turbidity is addressed by the water supplier before groundwater is sent into the distribution system. As expected, slightly elevated levels of heavy metals were detected; however, these concentrations were significantly reduced through attenuation and did not exceed standards. The NURP Study found that chloride

concentrations in stormwater generally increase by two orders of magnitude during the winter months. According to the NURP Study, chloride is not attenuated in soils like lead and chromium, and thus it is anticipated that the amount of chloride contributed to groundwater will be correlated with the amount of salt applied to roadways and parking areas within the stormwater drainage area, during winter months. Reduction or elimination of roadsalt would assist in reducing chloride concentrations in stormwater runoff. The public road system is already established in the village and much of the private land is already developed. Given the finding that only limited new development may occur, and that development will occur under either existing or proposed zoning, it is not expected that any significant new impacts will be introduced as a result of chloride in runoff.

No significant change in runoff conditions is expected as a result of the adoption of village-wide zoning. Site-specific land use will be subject to subdivision, site plan and building permit review, at which time best management practices for stormwater management can be evaluated.

As noted in the Narrow Bay Floodplain Protection and Hazard Mitigation Plan (the Narrow Bay Plan), the Mastic/Shirley peninsula is highly susceptible to flooding, due to its low elevation and location on the shores of Narrow Bay and Moriches Bay. The existing road system is established and evacuation routes are noted in signage within the village. Much of the development that would occur under either existing or proposed zoning is "infill" development on scattered vacant lots. New development encouraged by zoning will occur in existing established areas with roads in place. In the case of a significant flood event, advance warnings are given at the county level and evacuation procedures implemented in advance of such an event. The proposed adoption of zoning is not expected to adversely impact flood conditions or hazard.

Proposed Mitigation

- Erosion control and construction phasing plans will be prepared for individual site developments during site plan review that will specify the methods to be utilized during construction to control transport of sediment and stormwater runoff.
- Site-specific land use applications will undergo SEQRA review under 6 NYCRR Part 617.
- New development will be required to retain all stormwater runoff on-site. For those individual projects that involve one or more acres of disturbance, a SWPPP must be prepared pursuant to the requirements of the NYSDEC, and drainage systems must be designed to provide water quality and quantity requirements pursuant to the 2010 NYS Stormwater Management Design Manual.
- Identification and removal of any existing illicit discharges to stormwater conveyance systems during redevelopment will improve functioning of these systems, as well as reduce pollutant loads to surface water and groundwater.
- New development will require conformance to SCDHS regulations that control the use, storage and disposal of toxic and hazardous substances.
- New construction in the village would utilize water-conserving plumbing fixtures and mechanical systems that will conserve water resources. Additionally, incentive-based use of "green development" options such as green roofs, grey-water and rainwater recycling, roof gardens, etc. may be encouraged, reducing water demand.

Vegetation and Wildlife

Anticipated Impacts

Vegetation, Wildlife & Habitats - It is important to note that adoption of the Village Zoning Code will not

result in any immediate impacts to vegetation and wildlife, however, development resulting from changes in zoning could potentially impact vegetation and wildlife.

Ultimately, impacts to wetlands will be evaluated on a case-by-case basis as development is proposed. However, in general, impacts associated with the proposed zoning code on wetlands are anticipated to be minimal as current SCDHS, State and Federal regulations prohibit development within vegetated wetlands. As a result, changing the zoning of parcels that are primarily wetlands with little to no available upland area for development would not result in development of wetland areas.

It is noted that vacant, non-wetland parcels may be developed under the proposed village zoning code; however, these parcels may also be developed under current zoning code. While intensity of use of specific parcels may change, development of these parcels would require some amount of natural vegetation in either scenario. As under both scenarios, some clearing of natural vegetation would occur with development of a specific parcel, impacts from the change of zone on this parcels is anticipated to be the same in both scenarios.

As with vegetation, impacts on local wildlife would be similar under both development under existing zoning and development under the proposed zoning. Clearing of these parcels would occur under both scenarios, resulting in the temporary or permanent displacement of wildlife in that area. As the village is mostly developed, wildlife anticipated to utilize the area would be adapted to suburban environments. As such, wildlife utilizing the few vacant wooded areas within the village would be anticipated to be able to adapt to the suburban environment. As a result, impacts to wildlife as a result of the proposed change of zone are anticipated to be minimal.

As the developable vacant parcels are located in areas surrounded by development, these areas are not expected to act as refuges for rare, threatened or endangered species. As the New York Natural Heritage Program (NYNHP) did not identify any rare, threatened or endangered species in these areas, impacts associated with rare, threatened or endangered species on these parcels is not anticipated. While the NYNHP did identify one threatened plant in the vicinity of Johns Neck Creek, this plant thrives in wetlands habitats which, as previously indicated, cannot be developed under existing or proposed zoning. As a result, impacts to rare, threatened or endangered species are not anticipated.

Regulatory Conditions - The village is currently not proposing wetland regulation within the proposed action. As a result, all existing state and federal wetland regulations would still apply under the proposed action, and development within regulated wetlands would not be permitted. Development of any parcel within the State regulated adjacent area for freshwater or tidal wetlands would require a permit from the NYSDEC. Improvements below spring high water (SHW) level or within non-state regulated wetland areas would also require a permit from the US Army Corps of Engineers (ACOE) and New York State Department of State (NYSDOS). As the regulatory conditions of development of parcels within the village under the proposed zoning code will not change, impacts associated with regulatory permits are not anticipated.

Proposed Mitigation

- The village will review development associated with vacant vegetated parcels on a case by case basis to determine impacts to vegetation and wildlife.
- New development will be required to adhere to Resolution 614-2007 enacted by the Suffolk County Legislature which bans certain invasive species within Suffolk County.
- Development within the State regulated wetland adjacent area will require permits from the NYSDEC.

- Development within non-State regulated wetlands or below SHW will require permits from the NYSDEC, ACOE and NYSDOS.
- Site-specific land use applications will undergo SEQRA review under 6 NYCRR Part 617.

Land Use, Zoning and Plans

Anticipated Impacts

Land Use - Adoption of the proposed action is a regulatory action and would not result in any physical changes to the village; therefore, no impact on land uses would occur.

Development under the proposed zoning would generate 4 residences, 38,775 SF of commercial space and 3,526 SF of industrial space more than would occur from development under the existing zoning. The impacts associated with this amount of growth would have a minor effect on the acreages and the geographic distribution of land use types in the village, particularly given that residential use is the dominant use category in the village and this will only change by a potential for 4 additional residences.

The existing pattern of land use in the village would remain largely unchanged as a result of the proposed action. The major anticipated land use changes would involve development of currently-vacant sites; these sites would eventually be developed regardless of the proposed adoption of a new zoning code. The large majority of the village is currently used for residential purposes and would only be slightly increased by the proposed zoning. The limited areas of commercial use, most of which are distributed along Neighborhood Road and Commack Road/Mastic Beach Road would be increased in these areas, but this use type would not be expanded into areas where it is not already represented. The proposed zoning would also accommodate a small amount of new industrial development.

Overall, the proposed zoning is intended to reflect the existing pattern of land use in the village, and expand some areas for commercial growth and waterfront development potential. The existing residential districts and commercial areas will remain. Waterfront development potential will be limited due to natural resource constraints. No specific actions are proposed, therefore, any change in land use will occur incrementally over a long period of time as land use used as provided for under the new zoning. Any site specific development would be subject to subdivision, site plan and/or building permit review at the time development is proposed. During that review, conformance with various SCDHS, NYSDEC and related land use requirements would be determined. Consequently, no significant adverse environmental impacts have been identified with respect to land use as a result of the proposed project.

Zoning - Adoption of the proposed action is a regulatory action and would not result in any physical changes to the village; therefore, no physical impact on zoning would occur. However, the proposed action will replace the existing village zoning categories with a new set of zoning categories. This will have the effect of establishing a framework around which future village growth and development will occur.

The proposed action will change the zoning classifications of all of the zoned acreage of the village which encompasses 7,579 properties and 2,423 acres. The village's zoning districts will continue to provide mainly for the residential uses, with secondary amounts of commercial uses.

As for the proposed zoning, the impact on zoning from a difference of 4 residences, 38,775 SF of commercial space and 3,526 SF of industrial space on the overall pattern of zoning on 2,423 acres (or

2,075.74 acres of land subject to zoning) of the village would not be significant. The zoning would more closely reflect existing land use, and would provide potential for some additional commercial and waterfront district use. Future land use in conformance with zoning would be subject to subdivision, site plan and/or building permit review and would therefore be reviewed at the time that development is proposed.

At present, the Town zoning is not reflective of the existing pattern of development. A majority of land in the village is zoned residential under the A-1 district, yet most lots are well under 40,000 SF. The proposed zoning will more closely reflect the lot sizes present within the village. As a result, the proposed zoning will reduce the number of variances needed in connection with land use approvals. This is considered a beneficial impact for village residents with no loss in protection of environmental resources.

No specific actions are proposed, therefore, any change in land use will occur incrementally over a long period of time as land use used as provided for under the new zoning. Any site specific development would be subject to subdivision, site plan and/or building permit review at the time development is proposed. During that review, conformance with various SCDHS, NYSDEC and related land use requirements would be determined. Consequently, no significant adverse environmental impacts have been identified with respect to land use as a result of the proposed project.

Plans - As the Village of Mastic Beach does not currently have a land use or master plan in place, no impact to such a resource from either the proposed action or the proposed zoning could occur. However, the placement of lands within the village does address planning goals to have zoning more clearly reflect land use in the village.

Proposed Mitigation

- The proposed action will enable the community to realize their desire to enact and implement their own land use decisions, to remedy the disconnect between the village's zoning districts and the actual pattern of land uses in the village, to protect and preserve their community identity, and to obtain the authority to guide their future development.
- Site-specific land use applications will undergo SEQRA review under 6 NYCRR Part 617.

Community Character

Anticipated Impacts

Visual Character - Adoption of the proposed action is a regulatory action and would not result in any physical changes to the village; therefore, no impact to the visual character of the village would occur.

This difference in yield would not be sufficient to cause a significant adverse impact on the visual character of the village, as such development would be located on sites zoned for such uses, and in proximity to other similar or complementary uses. This would suggest that this development would conform to the intensity and type of development in the vicinity, which would tend to lessen the potential for significant and/or adverse aesthetic impacts.

Noise - Adoption of the proposed action is a regulatory action and would not result in any physical changes to the village; therefore, no impact to the noise environment would occur.

The difference in impacts with respect to residential noise associated would be related to the amount of traffic noise generated by 4 residences. This type of use does not, in and of itself, generate a significant amount of noise. In addition, the size of this difference in yield, 4 residences, is small and is not expected to change the pattern of land uses in the village such that noise-generation patterns will be significantly changed, so the character of the noise environment is not expected to change significantly.

For non-industrial uses, it is expected that truck traffic and HVAC systems are the primary sources of noise to consider. It is not expected that significant changes in the pattern of land uses will result from the proposed action, so that existing non-residential areas would receive the bulk of any new non-residential uses. This means that the pattern of noise generated in such areas of the village would not be impacted by the small difference in development between the two scenarios. With respect to mechanical system noise, such systems will generally be located on building roofs, and distant from street-level receptors. In addition, new facilities would use new mechanical systems that are generally more quiet in comparison to individual units and older systems. Finally, any and all new non-residential development will be required to conform to the Village Noise Code.

Proposed Mitigation

- Site-specific land use applications will undergo SEQRA review under 6 NYCRR Part 617.
- Projects including residential uses located on arterial roadways should provide attenuation, or provide a noise assessment to determine the potential impact and an appropriate level of attenuation.

Community Services

Anticipated Impacts

Adoption of the proposed action is a regulatory action and would not result in any physical changes to the village; therefore, no impact to the village's community services would occur.

Taxes - There will be an increase in taxes generated on the soft sites from either development scenario. However, the proposed zoning would allow for 4 residences, 38,775 SF of commercial space and 3,526 SF of industrial space more than would result from the existing zoning. This difference in yield would not be sufficient in size or character to cause a significant difference in the beneficial impacts on the tax structure of the village.

Schools - The proposed zoning would allow for 4 residences more than would result from the existing zoning. The difference in the number of school-age children from these units would not cause a significant adverse impact on either enrollments or school expenditures.

Police Protection - The difference in the yields of the two development scenarios, 4 residences, 38,775 SF of commercial space and 3,526 SF of industrial space, would not be sufficient in size or character to cause a significant adverse impact on the Suffolk County Police Department's (SCPD's) existing level of patrol responsibilities. There will, nonetheless, be an increase in taxes generated on the soft sites from either development scenario that would tend to offset the added costs of service provision. The SCPD will have the opportunity to provide input on proposed development plans during the site plan review of individual projects.

Fire Protection - The proposed zoning would allow for 4 residences, 38,775 SF of commercial space and 3,526 SF of industrial space more than would result from the existing zoning. This difference in yield is

not expected to be sufficient in size or character as to cause a significant adverse impact on the Mastic Beach or Mastic Fire Departments, as this development difference is only an incremental increase in developed areas within each fire district, and fire protective services have been established for these areas. There will, nonetheless, be an increase in taxes generated on the soft sites from either development scenario that would be sufficient to offset at least a portion of any increased department costs of services.

Sewer - As there are no publicly-accessible sewage treatment plants (STPs) in the village, there would be no impacts to such service. All development would be required to conform to SCSC Article 6 regulations as part of individual site plan reviews. The site plan review process and associated site specific environmental review will ensure that development does not further compromise the village's infrastructure, while providing a clear path toward responsible economic development that will benefit the entire community.

Water - The difference in yields associated with the existing and proposed zonings (4 residences, 38,775 SF of commercial spaces and 3,526 SF of industrial space) is not expected to require a volume of water that would adversely impact the Suffolk County Water Authority or its ability to continue to provide adequate service to its customers.

Recreation - The difference of 4 residences between the yields of the existing and proposed zonings would not be expected to produce a significant difference in the number of village residents that would potentially use public recreational spaces. As a result, there would not be a substantial difference in the anticipated levels of usage of these public facilities, so that no significant impact would be anticipated for the proposed action.

Proposed Mitigation

- Significant increases in tax revenues and allocations to each of the taxing jurisdictions, including the village, are expected from development associated with the proposed zoning. The revenues generated are anticipated to exceed the costs associated with providing such services, thereby mitigating the impact of the increased costs to the pertinent community services to provide services.
- School district tax revenues are estimated to mostly, if not completely, compensate for the expenses incurred by the public school students generated.
- Conformance to the NYS Building and Fire Safety Codes will partially mitigate potential health and safety impacts on fire response providers.
- The Mastic and Mastic Beach Fire Departments will have the opportunity to review future proposed site plans to ensure that their needs, including provisions for emergency access, hydrant locations, sprinkler systems, fire alarms, and smoke and carbon monoxide detection, are properly addressed.

Demography and Socio-Economics

Anticipated Impacts

It is not expected that the small difference in population that would result from the small difference in residential yield (4 residences) under the existing and proposed zonings would produce any significant difference in impacts to the village's population or its associated age distribution. There are also small differences in the amounts of industrial (3,526 SF) and commercial (38,775 SF) spaces anticipated between development of the soft sites under their existing and proposed zonings. These differences in yields would result in small differences in the numbers and types of employees in the village.

Proposed Mitigation

- As no significant adverse impacts are anticipated with respect to demographics, no mitigation is necessary or proposed.

Traffic

Anticipated Impacts

The following has been taken from the traffic engineering analysis prepared for the proposed action:

> With these level of service results , it is the professional opinion of Nelson and Pope that the study area has substantial roadway capacity to accommodate a significant amount of development without requiring significant levels of traffic mitigations. However, further review and analyses are recommended for any developments proposed in the Village to estimate actual impacts and develop mitigation measures if necessary.

Proposed Mitigation

- The traffic engineering analysis indicates that there is substantial capacity on the village's roadways to accommodate future traffic growth without requiring significant levels of traffic mitigation. Nevertheless, each future, site-specific development application will be subject to village engineering review and approval, which may include need for traffic mitigation measures.

Cultural Resources

Anticipated Impacts

Based on the absence of any identified cultural resources within the village, it is expected that no adverse impacts to such resources would occur as a result of the proposed action.

As noted above, for those limited portions of the Village of Mastic Beach that are also within the Archaeo-Sensitive Areas of sites in Shirley and Mastic, future site-specific development applications would require communication with the New York State Historic Preservation Office (SHPO) to determine the necessity for a detailed site investigation to determine the potential for the presence of cultural resources.

Proposed Mitigation

- Cultural resource evaluation may include contact with SHPO for review, input and approval. If that entity deems it appropriate, additional analysis may be required, or revisions to the application may be deemed necessary by SHPO to mitigate such impacts.

Alternatives

SEQRA and its implementing regulations at 6 NYCRR Part 617.9(b)(5)(iii)(v) require the consideration and evaluation of a range of reasonable alternatives to a proposed action that are feasible, considering the objectives and capabilities of the project sponsor. This document includes one alternative: No Action, which assumes that the proposed action is not implemented, and that the existing Village Zoning Code is not changed.

If the proposed action is not undertaken, the village would remain as it is currently zoned, so that all future development would occur under the existing Village Zoning Code. Analysis of full build-out under existing zoning is useful as it identifies the anticipated character of the village if no code and/or map amendments are undertaken, and if market conditions change and/or if growth is projected and applied over a greater period of time. The full build-out of the village under existing zoning assumes 175,817 SF of commercial space and 25 residences on the 92 soft sites, encompassing 22.84 acres of land.

The No Action alternative assumes that the village zoning will remain unchanged, and that the soft sites are developed accordingly. The outcome of this assumption is that, first and foremost, the beneficial impacts of the proposed action would not be realized in the village, and in fact the impacts associated with this alternative would run counter to the goals and objectives of the village. The current land use and zoning mixes and patterns will continue – which is to say that a strong chance for the continued presence of unwanted land uses in undesirable locations would occur, with implications for future development in the village that will be unacceptable to its residents. In summary, the No Action alternative is not at all consistent with the goals or desires of the village.

Permits and Approvals Required

This document analyzes the anticipated environmental impacts of the adoption of a Village Zoning Code. The Village Board (as lead agency under SEQRA), will review the document and determine its completeness for the purpose of public review and comment. Upon acceptance of the document by resolution, the Village Board will publish a Notice of Completion of the DGEIS in the NYS Environmental Notices Bulletin ("ENB"), which is administered by the NYSDEC. Simultaneously, the lead agency will arrange for distribution of copies of the document to Involved Agencies, Interested Agencies, and local libraries, as well as web access to an electronic copy of the full document. A comment period of not less than 30 days will be provided for public inspection and comment on the document, in conformance with SEQRA requirements.

All substantive comments on the DGEIS received during the comment period will be addressed in an FGEIS. The FGEIS will include the DGEIS by reference, and these two documents comprise the full GEIS. The FGEIS will be prepared by the lead agency and once determined to be complete, the lead agency will publish a Notice of Completion of the FGEIS in the ENB, with distribution to Interested and Involved Agencies and local libraries, and electronic posting for web access. The document will be available for public review and consideration in conformance with SEQRA requirements.

The Lead Agency will then consider the information in the GEIS and public and agency comments for not less than 10 days, before preparing its Findings Statement. If other agencies are involved, each Involved Agency is responsible to prepare their own Findings Statement, on which to base their individual decisions on the proposed action. The SEQRA process concludes with the adoption of the Findings Statement, enabling the SCPC to issue its 239m referral letter and the Village Board to render an informed decision on the proposed action (see **Table S-4**).

If the proposed Zoning Code is approved, subsequent reviews, permits and/or approvals will be required for the site-specific development proposals that will be enabled by the proposed action. **Table S-5** below presents a list of these anticipated reviews, permits and approvals.

Table S-4
REVIEWS, PERMITS AND APPROVALS REQUIRED
Proposed Action

Agency/Entity	Review, Permit/Approval Required
Village Board of Trustees	Zoning Code & Map Amendments approval
	SEQRA Process administration
SCPC	General Municipal Law Section 239m review

Table S-5
REVIEWS, PERMITS AND APPROVALS REQUIRED
Future Site-Specific Applications

Agency/Entity	Review, Permit/Approval Required
Village Board of Trustees	Rezoning Approval
	SEQRA Process administration
Village Planning Board	Site Plan review
Village Building Department	Building permit
SCDHS*	Water Supply approval
	Sanitary System approval
SCPC	General Municipal Law Section 239m review
SCDPW*	Roadwork Access Authorization
SCWA	Water Supply approval
NYSDEC	SPDES* GP 0-10-001 General Permit
NYSDOT*	Roadwork Access Authorization

* SCDHS-Suffolk County Department of Health Services; SCDPW-Suffolk County Department of Public Works; NYSDOT-New York State Department of Transportation; SPDES-State Pollutant Discharge Elimination System.

SECTION 1.0

DESCRIPTION OF THE PROPOSED ACTION

1.0 DESCRIPTION OF THE PROPOSED ACTION

This document is the Draft Generic Environmental Impact Statement (DGEIS) for the **Adoption of Zoning Code for the Village of Mastic Beach** (hereafter, the proposed action*).* The Board of Trustees of the Incorporated Village of Mastic Beach (hereafter, the Village Board) is proposing to replace the village's existing zoning code (which duplicates the Town of Brookhaven's zoning code, and was adopted on an interim basis when the Village of Mastic Beach was established in 2010) with its own zoning code.

The Village of Mastic Beach is located in the southern portion of the Town of Brookhaven, Suffolk County, Long Island, New York. The village is approximately 2,423 acres in size, of which approximately 2,077 acres are land surfaces and therefore subject to zoning regulations under this proposed action.

A DGEIS was required by the Village Board as "lead agency" designated pursuant to the New York State Environmental Quality Review Act (SEQRA). In that capacity, the Village Board finds that a DGEIS is needed to address potential significant adverse environmental issues, has issued a Positive Declaration, and elected to conduct formal scoping pursuant to Title 6, New York Code of Rules and Regulations (6 NYCRR) Part 617.8.

In general, a GEIS is composed of two separate documents: the "Draft" GEIS and the "Final" GEIS. The DGEIS presents a detailed description of the proposed action, identifies and analyzes any potential impacts (whether adverse of beneficial), assesses their significance, describes potential mitigating measures of the action, and describes/analyzes potential alternative actions that may be taken to achieve the goals being sought. The Final GEIS (FGEIS) presents all written comments on the proposed action received during public and agency review period, as well as written and verbal comments received during and subsequent to the public hearing (if held). The FGEIS also presents the sponsor's responses to all substantive comments received.

Under SEQRA Part 617.10, a GEIS may be used to assess the environmental impacts of:

(1) a number of separate actions in a given geographic area which, if considered singly, may have minor impacts, but if considered together may have significant impacts; or
(2) a sequence of actions, contemplated by a single agency or individual; or
(3) separate actions having generic or common impacts; or
(4) an entire program or plan having wide application or restricting the range of future alternative policies or projects, including new or significant changes to existing land use plans, development plans, zoning regulations or agency comprehensive resource management plans.

The proposed action is described by (4) above and involves only a change in the Village of Mastic Beach Zoning Code which is a legislative act with no site-specific development proposals or physical changes proposed within the village. After completion of the DGEIS and FGEIS, the Village Board, as lead agency, will then be responsible for the preparation of a Findings Statement, which will conclude the SEQRA review process.

1.1 Background, Need, Objectives and Benefits of the Proposed Action

1.1.1 Project Background

The Village of Mastic Beach had been a hamlet within the Town of Brookhaven until November 2010, at which time it incorporated as a village. The reason that the village's residents sought to establish their government was related to the desire to enact and implement their own land use decisions, to remedy the disconnect between the village's zoning districts and the actual pattern of land uses in the village, to protect and preserve their community identity, and to obtain the authority to guide their future development.

At the time the village was created, and as an interim measure until the community had time to thoroughly review their options and choose a single path to the future, it was decided to retain the Town's zoning districts that were in place as of November 2010. These Town zones would remain in effect until the village could devise and emplace its own Zoning Code.

The proposed zoning code for the village was drafted by the Village Zoning Commission, and has been subject to multiple public sessions open for input on the proposed code. The Village Zoning Commission issued the final proposed zoning code in January 2013 to be considered by the Village Board of Trustees for adoption. This GEIS is designed to analyze the proposed action and its potential impacts, so that the community and village have a thorough and complete understanding of the proposed action, and the Village Board can make an informed decision on that proposed action.

The following provides an overview of the steps the village has undertaken to-date in relation to the proposed action:

- Village of Mastic Beach incorporated in November 2010.
- Village Board charges Village Zoning Commission to undertake preparation of draft Zoning Code (June 2012).
- Village Zoning Commission conducts public meetings to gather public opinion, input, information, etc., to determine community goals and concerns (July 2012 to January 2013). Draft Zoning Code prepared.
- Village Zoning Commission completes its Final Draft Zoning Code and submits it to the Village Board (January 7, 2013).
- Village Board accepts Final Draft Zoning Code; Village Zoning Commission dissolved (January 8, 2013).
- Village Board reviews draft Zoning Code and issues resolution declaring itself as lead agency under SEQRA for the application (April 17, 2013).
- Village Board issues its Positive Declaration on the proposed action (April 17, 2013; see **Appendix A-1**).
- Village Board adopts Final Scope for the DGEIS (May 14, 2013; see **Appendix A-2**).

1.1.2 Public Need and Village Objectives

The public interest and village goal is to obtain local control of the future development of Mastic Beach for the residents of Mastic Beach. This was the primary motivation for the creation of the village in 2010. Consequently, it became necessary for the new village to establish its own Zoning Code (beyond the Town's Zoning Code used on an interim basis), to establish a framework by which this goal was to be achieved. The proposed action represents the next logical and necessary step to achieve this objective.

As stated in the Final Draft Zoning Code (which is designated Chapter 530 of the Village Code), the following expresses the village's purpose of the proposed action.

ARTICLE I. PURPOSE

This chapter is adopted for the purpose of promoting the health, safety, and general welfare of the community and in furtherance of the following related and more specific objectives:

A. To guide and regulate the orderly growth, development and redevelopment of the Village of Mastic Beach in accordance with the more general long-range objectives which are deemed beneficial to the interests and welfare of the people.
B. To protect the established character and the social and economic well-being of both private and public property.
C. To promote, in the public interest, the utilization of land for the purposes for which it is most appropriate.
D. To promote, in the public interest, the preservation of prime natural areas.
E. To secure the maximum recharge of the Village of Mastic Beach's fresh groundwater reservoir through protection of the natural environment and watershed areas.
F. To protect the healthful biological and chemical balance in the adjacent bays, estuaries and all tributary watercourses and drainage lines.
G. To secure safety from fire, panic, flood, storm and other dangers; to provide adequate light, air and convenience of access; and to prevent environmental pollution.
H. To prevent overcrowding of land or buildings and to avoid undue concentration of population.
I. To conserve the value of buildings and to enhance the value of land throughout the Village of Mastic Beach.
J. To provide housing sites for residents of the community compatible with their economic means.
K. To lessen and, where possible, to prevent traffic congestion on public streets and highways.
L. To eliminate nonconforming uses gradually.
M. To conserve and reasonably to protect the natural scenic beauty and cultural and historic resources of the Village of Mastic Beach and its environs.

By way of the proposed action, Mastic Beach seeks to establish the statutory framework necessary to achieve their goal of controlling the growth and character of their community. The proposed Village Zoning Code is that framework.

1.1.3 Benefits of the Proposed Action

The primary benefit to the Village of Mastic Beach will be to give the village control over its future using development controls designed by the village that are based on village conditions. This benefit will be realized by the following:

- the new Zoning Code has been prepared by a village entity composed of village residents, so that it would reflect the goals and desires of the village to a better degree than was possible under the prior, interim code, which was the Town Zoning Code;
- the new Zoning Code will remove the existing non-conformity between the village's zoning districts and the land uses that exist in the village, so that these characteristics will be rationalized and development controls applied to future growth will be consistent with actual land use patterns;
- the new Zoning Code has been designed based upon existing village development conditions and land use patterns, so that future growth would more accurately reflect village-wide growth goals than would otherwise result from a Town-based Village Zoning Code; and
- the new Zoning Code will enable future growth to better conform to/complement existing development into which growth must fit; this ability will provide for a better and more attractive land use pattern and village-wide aesthetic than would otherwise be possible.

1.2 Location of the Proposed Action

As noted earlier, the Incorporated Village of Mastic Beach is located in the southern portion of the Town of Brookhaven, along the northern shores of Narrow Bay and Moriches Bay (see **Figure 1-1**). The village is approximately 2,423 acres in size, of which approximately 2,077 acres are dry land and therefore subject to zoning regulations (**Figure 1-2**). **Figure 1-3** presents the existing zoning districts of the village. As the proposed action would change the names and standards of all of the village's zoning districts, the proposed action applies to the entire zoned acreage of the village.

It is noted that much of the village is already developed; however, a number of vacant sites remain. In addition, there would be nothing preventing the owners of developed sites from redeveloping their properties if the proposed action were adopted. Thus, there are a number of sites that could realistically experience development and/or redevelopment subsequent to the proposed action. For purposes of impact analysis in this DGEIS (and as required by SEQRA), the potential impacts of the uses and yields associated with sites that can be developed or redeveloped under the new zoning will be analyzed herein under both their existing and proposed zonings. **Figure 1-4** indicates the locations of potential development/redevelopment sites (also referred to as "soft sites"); the uses and yields assumed for these sites are discussed in **Section 1.4**.

At the present time under the Town zoning, the village is zoned overwhelmingly for low-density residential use, with much lower amounts of land set aside for business use (see **Appendix B**). The village is primarily zoned A-Residence-1 (A-1), which provides for detached single-family homes on lots of at least 40,000 square feet (SF) in size. The large majority of these sites are

already developed with homes on lots much smaller in size than 40,000 SF, hence, the village seeks to rezone these areas to conform with the existing pattern of development. A-2 zoning is the second-most represented zone in the village, and also is intended for detached homes on lots having at least 80,000 SF. Together, these two zones represent 95% of the acreage of the village; in fact, detached single-family residential zoning represents over 96% of the Village. Business zonings are limited in area and location, to a total of about 49 acres, found primarily along Commack Road/Mastic Road and Neighborhood Road, with smaller areas at Neighborhood Road/Lakeview Drive and at the end of Private Road, in Old Mastic. Finally, there are an estimated 13 acres of Planned Retirement Community zoning near the intersection of Peeker Street and Mastic Beach Road; this zoning is consistent with the existing retirement community use. As noted above and as discussed in **Section 3.1.1**, the pattern of land uses in the village does not fully conform to the existing zoning. These sites are *"grandfathered"* uses as they continue to exist but do not conform to existing zoning. A goal of the proposed action is to make these uses consistent with the new village zoning.

1.3 Discussion of the Proposed Action

The existing village zoning consists of the nine (9) Town zoning districts that were represented within the village when it was established in 2010, as follows:

- A-1 Residential (40,000 SF minimum lot size)
- A-2 Residential (80,000 SF minimum lot size)
- A-5 Residential (200,000 SF minimum lot size)
- A-10 Residential (40,000 SF minimum lot size)
- J Neighborhood Business (15,000 SF minimum lot size)
- J-2 General Business (4,000 SF minimum lot size)
- J-5 Gasoline Filling Station (20,000 SF minimum lot size)
- J-6 Highway Limited Business District (no minimum lot size)
- PRC Planned Retirement Community (minimum 10 acres)

Table 1-1a presents the uses allowed under the village's existing zoning districts. Under the proposed zoning code, eight (8) zoning districts and one floating district are proposed, as follows (see **Figure 1-5**):

- R-1 Residence District (7,500 SF minimum lot size)
- R-2 Residence District (80,000 SF minimum lot size)
- RH Retirement Housing District (minimum 8 acres)
- R/B Residence/Business District (10,000 SF minimum lot size)
- B-1 Business District (10,000 SF minimum lot size)
- B-2 Business District (20,000 SF minimum lot size)
- I Industrial District (20,000 SF minimum lot size)
- WD Waterfront District (10,000 SF minimum lot size)
- X Business District (Floating District - 20,000 SF minimum lot size)

Table 1-1b lists the uses allowed by the proposed village zoning districts. Under the current code, the majority of the lots in the village do not conform to their respective zoning district requirements. The proposed zoning code was developed to better reflect the existing land use, density and dimensional characteristics of parcels within the village, as well as to encourage orderly development consistent with the vision of the village. It is noted that no specific development proposals are considered by the proposed action; rather, the proposed action is limited to the establishment of a new zoning code for the village.

Table 1-1a
USES ALLOWED, Existing Zoning

Zone	Uses Allowed
A-1 A-2 A-5 A-10	One-family dwelling, except that mobile homes shall not be a permitted principal use. Churches or similar places of worship and parish houses. Convents and monasteries. Open farming; provided, however, that no storage of manure or odor- or dust-producing substances shall be permitted within 150 feet of any street line. The sale at retail or wholesale of farm, garden or nursery products produced on the premises shall be permitted. Public and parochial schools and private schools having a curriculum similar to that ordinarily given in public schools, but not including day-care facilities
J	Art galleries. Artist studio, provided all activities take place inside the building. Community center. Day-care facility. Exhibit hall. Mixed-use buildings, excluding those associated with retail operations. Museums. Nonprofit cultural centers. Offices. Open farming; provided, however, that no storage of manure or odor- or dust-producing substances shall be permitted within 150 feet of any street line. The sale at retail or wholesale of farm, garden or nursery products produced on the premises shall be permitted. Places of worship, parish house, or rectory. Single-family or two-family dwellings. Standalone farm stand. Veterinary hospital.

J-2	Bank without accessory drive-through facility. Bowling alley. Church or similar place of worship. Commercial center. Day-care facility. Delicatessen. Dry cleaners. Health club. Laundromats. Non-degree-granting schools, including self-defense, dance, swimming, gymnastics and similar instruction/programs, except those associated with manufacturing or truck driving. Office. Personal service shops, such as barbershops, beauty parlors, shoe repair shops, tailor shops and like services. Pharmacy without accessory drive-through facility. Shops and stores for the sale at retail of consumer merchandise and services. Shops for custom work and for making articles to be sold at retail on the premises. Take-out restaurant.[Added 7-13-2004, effective 8-2-2004 Undertaking establishments. Veterinarian, provided that all activities take place within the building. All uses identified as incentive uses within the Transitional Area Overlay District established in connection with the Montauk Highway Corridor Study Land Use Plan for Mastic and Shirley Phase II.
J-5	Town Board Special Permit: College or University Major restaurant Motor vehicle fueling station Outdoor storage Regional theater Commercial boat storage Commercial shipyard or boat repair yard Ferry terminal/facility Marina Motor vehicle dealership Motor vehicle wash Taxi station Laundromat, mega Planning Board Special Permit: Assembly and social recreation hall Bar, tavern or nightclub Billiard hall Mini-storage warehouse Motor vehicle repair Outside display Convenience store Uses within a designated Redevelopment Initiative: J-6, MF, PRC and PRCHC

J-6	Artist studio Bank with or without accessory drive-through facility Bar/tavern/nightclub Billiard hall Community movie theater Delicatessen Dry cleaners Health club Indoor recreation Laundromats Live performance-community theater Museum or non-profit cultural center Non-degree granting or recreational schools, including self-defense, dance, swimming, gymnastics, and similar instruction/programs, except those associated with manufacturing or truck delivery Office(s) Personal service shop Place of worship Restaurant Retail sales Second story of building restricted to residential or office use Shops for custom work and for making articles to be sold at retail on the premises Take-out restaurant
PRC	Rental housing units Attached or semi-attached single-family residences Detached single-family residences

Table 1-1b
USES ALLOWED, Proposed Action

Zone	Uses Allowed
R-1 R-2	One-family dwelling. Churches or similar places of worship, parish houses, convents and accessory buildings of a religious nature, when authorized by a special permit from the Board of Trustees. Public parks, playgrounds and recreational areas, when authorized or operated by a governmental authority. A regularly organized elementary or high school having a curriculum approved by the Board of Regents of the State of New York, accredited colleges or universities, by special permit from the Board of Trustees.
RH	Attached or semi-attached one-family residences. Must be senior citizen housing units.
R/B	Any principal and accessory use permitted in the R-1 Residence District. Offices and professional spaces as an accessory use by the owner of the residence where the principal use is as a residence, and when authorized by the Planning Board Home based business as an accessory use by the owner of the residence where the principal use is as a residence, and when authorized by the Planning Board Bed and Breakfast as an accessory use by the owner of the residence where the principal use is as a residence, and when authorized by the Planning Board
B-1	Offices and professional buildings. Shops and stores for wholesale and retail of consumer merchandise and services. Personal service shops, such as barbershops, beauty parlors and like services. Bowling alleys. Banks. Undertaking establishments. Game rooms, when allowed by special permit of the Zoning Board of Appeals Veterinarian. Billiard parlors, when authorized by special permit from the Zoning Board of Appeals. Restaurants, when authorized by special permit from the Zoning Board of Appeals Bars and Taverns, when authorized by special permit from the Zoning Board of Appeals Grocery stores, or any other retail store that sells prepared or packaged food products, when authorized by special permit from the Zoning Board of Appeals

B-2	Any use permitted in the B-1 Business District. Nightclubs or cabarets when allowed as a special exception by the Zoning Board of Appeals. Golf courses; private, country and yacht clubs with a Zoning Board of Appeals special exception . Shops and stores for wholesale and retail consumer merchandise and services. Laundromats, when allowed as a special exception by the Zoning Board of Appeals Hotels, motels, and boarding houses as a special exception by the Board of Trustees. Catering facilities; restaurant businesses with seating in excess of 99 persons. Schools: private, public, parochial, business and professional. Minor garages and motor vehicle salesrooms as permanent buildings, and used car lots, together with automobile service facilities other than body shops accessory to same, when permitted as a special exception by the Zoning Board of Appeals. Health facilities: (a) Health-related facilities, including diagnostic or treatment centers. (b) Out-patient care facilities. (c) Clinics. (d) After-care treatment facilities. (e) Psychiatric and public health centers. Other uses which, in the opinion of the Zoning Board of Appeals, meet the standards set forth in subsection A of this chapter and are of the same general characterization as those listed as permitted uses in this district. Outdoor storage when approved by the Zoning Board of Appeals Grocery stores, or any other retail store that sells prepared or packaged food products, when authorized by special permit from the Zoning Board of Appeals
I	Automobile Repair Shop and Automobile Service Stations Motor vehicle washing businesses or structures, except those that are incidental or accessory to a public garage or filling station. Sale, distribution or dispensing of any goods, wares, merchandise or services to persons while said persons are in automobiles or other motor vehicles. Mini storage facility.
X	In the X Business District, no building or premises shall be used, and no building shall be hereafter erected or altered, except for use as an adult establishment or tattoo establishment.
WD	Restaurants other than drive-through restaurants when located within 100 feet of the waterfront. Bed-and-breakfast establishments when located within 250 feet of the waterfront. Marinas, commercial boathouses, boat basins and boat repair yards that are incidental to other permitted uses set forth under this subsection A. Facilities for sightseeing, excursion, party and fishing boats. Membership boating and yacht clubs. Shops, stores and other facilities for the sale of goods and services at wholesale and/or retail, when located within 250 feet of the waterfront and when allowed as a special exception by the Planning Board. The goods or services must be related to or enhanced by the waterfront location. Such activities include, but are not limited to, the sale of fish and fish products, the sale of marine and boating products and tourist-related shops and activities.

A comparison of the uses allowed currently and proposed indicates that the new village zoning is intended to eliminate a number of uses that do not apply to the conditions of the village (e.g., farming), and to provide opportunities to located other uses within areas of the village that appear to be suited to site specific conditions (i.e., creating a Waterfront District in which to locate water-dependent uses, like marina and boat/yacht clubs).

A comparison of the village's existing and proposed zoning codes reveals that there are changes in the type and amount of development that could occur on the soft sites in the village under these two codes. Consequently, there would be differences in the impacts that would occur from such development scenarios; it is these impacts that warrant analysis in the context of the required DGEIS.

The following briefly describes each of the nine proposed new zoning district types:

- *R-1 Residence District:* this district, which will dominate the village, rationalizes the existing small-lot residential use that occupies the majority of the village.
- *R-2 Residence District:* the intent of this district is to provide for the existing low-density (i.e., large lot) residential development that is the second-largest land use type in the village.
- *RH Retirement Housing District:* this district addresses the existing PRC sites and need for additional senior, retirement-age residential projects on appropriately located sites in the village.
- *R/B Residence/Business District:* this zoning category will provide for mixed residential and business uses (e.g., doctor, dentist, accountant, lawyer, etc.) professional home/office space.
- *B-1 Business District:* this district is intended to provide for commercial uses that occupy smaller structures (hence the small minimum lot size required), that would serve a local customer base, such as those found in a downtown village setting.
- *B-2 Business District:* similar to the B-1 district, the B-2 zone would address the commercial needs of a local customer base, but occupying larger lots with larger buildings.
- *I Industrial District:* this district has similar lot size and lot coverage requirements as the B-2 zone, but would provide for light industrial uses.
- *WD Waterfront District:* this district is intended to provide for the types of development that are appropriate for and/or enhanced by a location on the water, such as a restaurant or marina.
- *X Business District:* this is a "floating" district, not designated for a particular site, but may be applied in any location where the Village Board may deem a specific commercial application appropriate, in consideration of adjacent and nearby land uses, proximity to infrastructure and nature of potential impacts.

Tables 1-2a and 1-2b below summarize and compare the dimensional regulations of the existing and proposed zoning districts, respectively. As can be seen, the new Village Zoning Code reduces the number of residential use-only zones from four to two, and reduces the minimum lot size requirements in those new zones to reflect the small lot sizes that currently exist in the village. The range of lot sizes under current zoning is from as large as 400,000 SF to as small as 40,000 SF. However, actual lot sizes in the village are much smaller, so that the new Code will allow for lots of either 80,000 SF or 7,500 SF. With regard to business zones, the existing four zones will be reduced to two zones, with the B-1 zone utilized in hamlet center locations (where consumer uses are expected on smaller lots), and the B-2 zone found on larger lots for uses that would be expected outside the hamlet downtown area. The new Code acknowledges the need for mixed residential and business uses in a single structure in the hamlet center, with the R/B district; such a zone type had not been available previously.

The new Code also provides specifically for waterfront-related uses, with the proposed WD district. This district would be attractive for water-related and -enhanced uses such as bed-and-breakfast sites, marinas, boat/yacht clubs, and the like.

Table 1-2a
SUMMARY OF ZONING STANDARDS
Existing Conditions

Zone	Building Height	Minimum Lot Area (SF)	Minimum Lot Width (feet)	Front Yard Setback (feet)	Minimum Side Yard (feet)	Minimum Total Side yard (feet)	Minimum Rear Yard (feet)	Building Area (% of lot)
A-1	35 feet, 2.5 stories	40,000	150	50	25	75	60	15
A-10	35 feet, 2.5 stories	400,000	400	80	40	90	85	3
A-2	35 feet, 2.5 stories	80,000	200	60	30	80	75	15
A-5	35 feet, 2.5 stories	200,000	300	70	35	85	80	6
J	35 feet, 2.5 stories	15,000	100	40	10	n/a	40	FAR* of 20%
J-2	50 feet, 3 stories	4,000	40	15	n/a	n/a	20	50
J-5	1 story	20,000	150	50	50	n/a	50	25
J-6	30 feet, 2 stories	n/a	100	40	12	n/a	35	30
PRC	35 feet, 2.5 stories	10 acres	n/a	30	30	n/a	30	20

Note: * FAR - Floor Area Ratio.

Table 1-2b
SUMMARY OF ZONING STANDARDS
Proposed Action

Zone	Building Height	Minimum Lot Area (SF)	Minimum Lot Width (feet)	Front Yard Setback (feet)	Minimum Side Yard (feet)	Minimum Total Side yard (feet)	Minimum Rear Yard (feet)	Building Area (% of lot)
R-1	30 feet, 2 stories (1)	7,500	75	30 (2)	15	30	25	35
R-2	35 feet, 2 stories (3)	80,000	150	60 (4)	30	80	75	15
RH	35 feet, 2.5 stories (7)	348,480 (8 acres)	200	25 (5)	50 (6)	n/a	n/a	FAR of 30%, density of 4 units/acre
R/B	30 feet, 2 stories (1)	10,000	100	30 (2)	15	30	25	35
B-1	35 feet, 2.5 stories (3)	10,000	80	5 (8)	n/a	n/a	15	75
B-2	35 feet, 2.5 stories (3)	20,000	100	25 (2)	n/a	n/a	30	35
X	35 feet, 2.5 stories (3)	20,000	100	25	n/a	n/a	25	35
I	35 feet, 2.5 stories	20,000	100	30	25	n/a	30	35
WD	35 feet, 2 stories (3)	10,000	80	30	20	10	25	40

Notes:
(1) Except in a Flood Damage Prevention Zone, in which case the maximum height shall not exceed 35 feet.
(2) Except for existing permitted structures on the same side of a street, where 40% of the street between the two nearest intersections has at least 2 structures, the average front yard setback for the existing structures is used. A maximum setback of 40 feet is permitted.
(3) Except in a Flood Damage Prevention Zone, in which case the maximum height shall not exceed 40 feet.
(4) Except for existing permitted structures on the same side of a street, where 40% of the street between the two nearest intersections has at least 2 structures, the average front yard setback for the existing structures is used. A maximum setback of 60 feet is permitted.
(5) Planning Board may approve up to 75 feet for front yard setback.
(6) Planning Board may approve a reduction in side yard to 25 feet based on nature and character of development within 500 feet of the parcel.
(7) Planning Board may approve a maximum height of 50 feet and/or 3 stories, whichever is less.
(8) Except for existing permitted structures on the same side of a street, where 40% of the street between the two nearest intersections has at least 2 structures, the average front yard setback for the existing structures is used. A maximum setback of 10 feet is permitted.

The proposed action will also reduce the height that buildings may attain, particularly in the business zones, so that potential adverse impacts on the visual character of the village would be reduced, and its rural/suburban appearance would be preserved.

Tables 1-3 and 1-4 provide information on the number of parcels, and the number of acres, affected by the proposed zoning. Review of the tables finds that there are 7,579 discrete properties in the village totaling about 2,423 acres, all of which will be subject to rezoning by the proposed action. The data in these two tables indicate that there are a total of 37 distinct zoning changes to be undertaken by the proposed action that will affect these 7,579 properties/2,423 acres (e.g., 20 parcels totaling 3.84 acres from A-1 to B-1, one parcel of 0.60 acres from A-1 to B-2, etc.). The majority of these zone changes will be to change the zoning of 6,687 parcels from A-1 to B-1; this will affect 1,593 acres, or over 65% of the village.

1.4 Build-Out Analysis of Existing and Proposed Zoning

As noted above, the proposed action is the adoption of a Village Zoning Code. As such, this effort will create the regulatory conditions under which future development in the Village of Mastic Beach will be guided, so that the village's goals can be achieved. The proposed action does not, in and of itself, include any site-specific development applications. In fact, few or no such applications are anticipated to result from approval of the proposed action, as much of the village is already developed and so is unlikely to be redeveloped, at least in the short term.

In order to determine the impact on the village's land use pattern that would result from the proposed action, it is first necessary to identify the properties that would be likely to be developed or redeveloped in the future. These are referred to *"soft sites"*, as opposed to *"hard sites"*, which are properties either already developed (and so are less likely to be re-developed), or sites that would likely never be developed (such as public open spaces, institutional properties, etc.). Then, a realistic estimate of the potential development of these soft sites, known as a "build-out", is performed. **Appendix C** presents the methodologies and assumptions used to determine the soft sites and derive the build-out estimate. The following provides a summary of this methodology:

1. Nelson, Pope & Voorhis, LLC (NP&V) utilized the geographic information system (GIS) tax parcel database for the Village of Mastic Beach obtained under a license agreement with the Suffolk County Department of Real Property. A total of 7,579 parcels are located within the village boundaries.
2. A sieve analysis was performed to reduce the number of parcels to be analyzed under the build-out (these parcels are not expected to generate a different level of development than exists under the current zoning). Specifically:
    a. Parcels that are currently zoned A-1 and are proposed to be zoned R-1 under the proposed zoning map were removed as not requiring further analysis (6,687 parcels).
    b. Parcels that are currently zoned A-1/J-2 (i.e., parcels that are predominately zoned A-1) and are proposed to be zoned R-1, were removed as not requiring further analysis as the change is not significant since these split zoned parcels are already effectively zoned A-1 (4 parcels).

Table 1-3
ANTICIPATED CHANGES OF ZONE
Number of Parcels Affected

Existing Zoning	Proposed Zoning									
	B-1	B-2	I	R/B	R-1	R-2	RH	WD	**Water***	**Totals**
A-1	20	1		238	6,687	25		24		**6,995**
A-1/J-2	14			5	4			1		**24**
A-10					1					**1**
A-2					192	76		20		**288**
A-2/A-1						1				**1**
A-5					5					**5**
J	46				31					**77**
J-2	122	2	2	9	9	4		4		**152**
J-2/A-1	11	1		1	1					**14**
J-2/J-4				1						**1**
J-5		1								**1**
J-6	4									**4**
PRC							6			**6**
ROW						3	1			**4**
Water*					1				**5**	**6**
Totals	**217**	**5**	**2**	**254**	**6,931**	**109**	**7**	**49**	**5**	**7,579**

Note: * The large majority of water surfaces of the village are not zoned.

Table 1-4
ANTICIPATED CHANGES OF ZONE
Acreages Affected

Existing Zoning	Proposed Zoning									
	B-1	B-2	I	R/B	R-1	R-2	RH	WD	**Water***	**Totals**
A-1	3.84	0.60		88.53	1,593.42	33.61		4.89		**1,724.91**
A-1/J-2	3.74			1.20	0.97			0.61		**6.52**
A-10					0.18					**0.18**
A-2					40.88	205.15		3.09		**249.12**
A-2/A-1						20.03				**20.03**
A-5					2.12					**2.12**
J	8.07				5.13					**13.19**
J-2	18.57	3.79	0.40	1.63	3.69	1.21		4.37		**33.66**
J-2/A-1	3.47	1.37		0.41	0.23					**5.47**
J-2/J-4				0.49						**0.49**
J-5		0.24								**0.24**
J-6	0.95									**0.95**
PRC							12.62			**12.62**
ROW						4.04	2.24			**6.29**
Water*					1.24				346.36	**347.61**
Totals	**38.64**	**6.00**	**0.40**	**92.26**	**1,647.85**	**262.78**	**14.86**	**12.95**	**346.36**	**2,423.39**

Note: * The large majority of water surfaces of the village are not zoned.

a. Parcels that are currently zoned A-2 and are proposed to be zoned R-2 are removed as not requiring further analysis since the change is not significant in terms of development potential (76 parcels).

b. A parcel that is currently zoned A-2/A-1 (the parcel that has the majority of site area within the A-2 zone) and is proposed to be zoned R-2 was removed from the analysis since this split zoned parcel is already effectively zoned A-2 (1 parcel).

c. Parcels that are currently zoned PRC and are proposed to be zoned RH are removed from the analysis, as this represents no significant change in use potential (6 parcels).

d. Parcels that are currently identified as right-of-way (ROW) are removed from the analysis as these parcels represent privately owned roadways (4 parcels).

e. Parcels that are currently identified as WAT (water) are removed from the analysis as these parcels represent underwater lands (6 parcels).

f. Parcels that are currently zoned A-1 and are proposed to be zoned R/B and are not vacant are removed from the analysis as this represents no significant change for these parcels due to Suffolk County Department of Health Services sanitary restrictions (230 parcels).

3. Of the remaining 795 parcels, vacant parcels were identified within the village as these have the greatest potential for future development (131 parcels).

4. If not already identified as vacant (i.e., parcel is developed), parcels in the following categories were reviewed for site specific uses:

   a. A-1 to B-1

   b. A-1 to B-2

   c. A-1 to WD

   d. A-2 to WD

   e. J-2 to I

   f. J-2/J-4 to I

5. If the uses in the above listed categories were not consistent with the proposed zoning, the uses were identified as a "soft site." Combining the vacant parcels and the parcels with a potential change in future use, 158 soft sites were identified.

6. Of the 158 parcels, those that consisted of vegetated tidal or freshwater wetlands were removed from the parcels that needed further analysis (39 parcels) as these are not buildable in either scenario.

7. A total of 119 parcels were identified as needing further analysis.

8. Also reviewed was the possible change in residential subdivision potential, specifically:

   a. If a parcel is currently greater than 80,000 SF in size and under current A-1 zoning, 1 lot per 40,000 SF is possible (due to Article 6 sanitary restrictions); if a parcel is greater than 160,000 SF in A-2 zoning (which requires 80,000 SF per lot), the lot was identified with the potential area for a subdivision. A total of twelve lots currently zoned A-1 are greater than 80,000 SF while a total of twelve lots currently zoned A-2 are greater than 160,000 SF. Under current zoning, 49 potential lots could be created from parcels currently zoned A-1 or A-1/J-2, while 58 lots could be created from parcels currently zoned A-2. In total, there is the

potential for 107 additional lots under current zoning.

b. It is noted that five parcels identified as WAT or ROW (surface water or roadways) are greater than 80,000 SF in size, however, these are not considered subdivideable because they are roadways or underwater lands.

c. Two parcels currently zoned PRC proposed to be zoned RH are greater than 80,000 SF in size, however, these parcels are part of the Fairfield Knolls East development which has already maximized density on this site.

d. One parcel currently zoned J-2 proposed to be zoned B-2 is greater than 80,000 SF in size. As a result, this parcel has the potential for additional commercial area due to Article 6 Sanitary Restrictions.

e. The above parcels with potential for subdivision under the current zoning regulations were analyzed to determine whether they could be subdivided under proposed zoning. Of the original 12 parcels zoned A-1 or A-1/J-2, only 8 could be subdivided under proposed zoning as a result in the upzoning of the parcels from A-1 or A-1/J-2 to R-2. The change in proposed zoning would result in a maximum potential of 36 lots.

f. Of the original 12 parcels zoned A-2 or A-2/A-1, all could still be subdivided under proposed zoning as the minimum lot area does not change for these lots. The proposed zoning would result in a maximum potential of 58 additional lots.

g. In summary, 13 fewer lots from subdivisions would be possible under the proposed zoning.

For the purpose of a build-out analysis it was appropriate to consider those adjacent parcels which have common owners (44 tax lots with at least two of the lots under common ownership, yielded 16 properties). Thus, the build-out analysis will be performed on a total of 92 properties. The full description of identification of "soft sites" is provided in **Appendix C**.

In order to provide a thorough analysis of the potential impacts of the proposed action (and as required by the SEQRA law), this document will assume development of these 92 soft sites (which encompass 22.84 acres; see **Figure 1-4**) under two build-out scenarios: their zonings under the existing Village Zoning Code, and their zonings under the proposed Village Zoning Code. The full description of the build out analysis is provided in **Appendix C**. The following summarizes the methodology used to derive the two build-outs prepared for these soft sites:

The development potential is based on the various regulatory requirements that determine the use and density of development of a site. Controlling factors typically include: sanitary density, allowable coverage (or floor area), required parking and other site design parameters (landscape, walkways, amenities). As noted, some parameters such as presence wetlands may restrict building envelopes or eliminate development potential if a parcel is entirely wetlands. Other factors such as zoning setbacks are not typically controlling factors as sanitary discharge, coverage and parking requirements more typically determine density of development.

The build-out methodology utilized the following assumptions.

- The build-out assumes full build-out of all "soft sites". It is noted that there may be existing commercial uses in the village which currently have floor area which exceeds the allowable density permissible under the proposed code. Thus the actual potential density is not represented here, but a comparison of the full build-out under existing and proposed codes.

- Parking requirements are 1 space per 150 SF of floor area for commercial properties ("B-1" and "R/B" zones proposed) and 1 space per 250 SF for the one industrial site ("I" zone proposed).
- The area allotted per parking stall is assumed to be 350 SF which provides area for the stalls and aisles (but does not account for additional area required for handicapped stalls).
- Five percent of site area was included for walkways and other amenities.
- For proposed code, the maximum coverage for a parcel in the B-1 district is 75%. Based upon the required parking, the maximum floor area ratio is actually reduced to approximately 33.5%. This assumes a two story building for most of the lots, since to maximize the floor area and achieve full parking; the building would need to be 2 stories.
- As per the proposed code, the maximum coverage for R/B is 35% and for WD is 40%; however, as with the B-1 District, the parking requirements and minimal area for walkways and other site amenities restrict the realistic floor area ratio to 33.5%.
- The maximum size floor area supported is 10,000 SF due to the SCSC. Each property was allowed 300 gallons for design flow since no property exceeds one acre (which would allow a greater design flow).
- Parcels which were split zoned under the existing zoning were analyzed individually to determine which zone would prevail. Under the Town of Brookhaven code, the more restrictive zoning district prevails unless the area of this portion is 25% or less. For example, for a 10,000 SF site that is zoned A-1/J-2, the J-2 portion of the site would need to be at least 7,500 SF in size to allow the J-2 zoning to prevail. In each case for the split zoned parcels, under the Town code, the more restrictive (residential) zoning prevailed.
- For the calculations, the property size is per the Suffolk County tax parcel database. For parcels that were combined for the purpose of build-out, a summation was performed.
- For residential lots, one home was assumed, whether or not the property met the minimum lot size requirement. This assumes that lots are recognized as single and separate, and represents a worst-case (maximum lot) scenario.

Table 1-5 summarizes the build-out uses and yields under both the existing zoning and the proposed zoning. The summary data shows that the proposed zoning would yield 4 residences, 38,775 SF of commercial space and 3,526 SF of industrial space more than the existing zoning would yield.

Table 1-6 presents a comparison of a number of characteristics and impacts of the two development scenarios, and quantifies the differences of each. Note that the differences in yields and impacts between the existing zoning and the proposed zoning are the basis on which the resource impact discussions (in **Sections 2.0 and 3.0**) are presented. **Section 5.2** of this document contains the No Action alternative, which is required by SEQRA and assumes that the proposed action is not undertaken, so that the existing village zoning remains in place.

This analysis assumption ensures that the review of the proposed action and its anticipated impacts is not improperly segmented under SEQRA, and also provides the village the ability to establish guidelines as to when further SEQRA review is appropriate, based on conditions and thresholds to be established in the Village Board's Statement of Findings (see **Section 1.5**).

Table 1-5
COMPARISON OF USES AND YIELDS OF SOFT SITES
Existing Zoning vs. Proposed Action

Use	**Anticipated Yields** (estimated)	
	Per Existing Zoning	Per Proposed Zoning
Commercial Space	175,817 SF	214,592 SF
Industrial Space	0 SF	3,526 SF
Residences	25	29

Table 1-6
ANTICIPATED CHARACTERISTICS AND IMPACTS OF BUILD OUT COMPARING EXISTING/PROPOSED ZONING

Parameter	Existing Zoning	Proposed Zoning	Difference
Commercial Space	175,817 SF	214,592 SF	+38,775 SF
Industrial Space	0 SF	3,526 SF	+3,526 SF
Residences	25	29	+4
Residents (1)	77	89	+12
School-Age Children (2)	18	21	+3
Employees (3)	230	285	+55
Water Use (4)	25,082	30,300	+5,218
Vehicle Trip Generation (vph):	---	---	---
Weekday AM Peak Hour	245	279	+34
Weekday PM Peak Hour	960	1,101	+141
Saturday Peak Hour	1,269	1,443	+174
Property Taxes ($/year)	809,913	995,706	+185,793
School District Taxes ($/year)	586,423	720,947	+134,524
School District Costs ($/year) (5)	252,258	294,301	+134,524
Net School District Fiscal Impact	+$334,164/year	+$426,646/year	+$92,482/year
Minimum Parking Spaces Required	1,242	1,504	+262

(1) Assuming 3.06 capita/unit.
(2) Assuming 0.71 school-age children/unit.
(3) Assuming 1.305 employees/1,000 SF of commercial or industrial space.
(4) Assuming SCDHS rates for wastewater: average of 0.10 gpd/SF for commercial, 0.04 gpd/SF for industrial and 300 gpd/unit for residences.
(5) Assuming $14,014/student annual expenditures, blended.

1.5 Permits and Approvals Required

This DGEIS provides the Village Board (as Lead Agency under SEQRA) and the Suffolk County Planning Commission ("SCPC") as an involved agency with information necessary to render informed decisions on the proposed action. Once accepted by the Lead Agency, this document will be subject to public review and written comments, followed by preparation of a Final GEIS ("FGEIS") responding to any and all substantive comments. Upon completion of the FGEIS, the Village Board will be responsible for the adoption of a Statement of Findings. This

will complete the SEQRA review process for the proposed action (see **Table 1-7a**), enabling the SCPC to issue its 239m referral letter and the Village Board to render its decision on the proposed action.

Table 1-7a
REVIEWS, PERMITS AND APPROVALS REQUIRED
Proposed Action

Agency/Entity	Review, Permit/Approval Required
Village Board of Trustees	Zoning Code & Map Amendments approval
	SEQRA Process administration
SCPC	General Municipal Law Section 239m review

If the proposed Zoning Code is approved, subsequent reviews, permits and/or approvals will be required for the site-specific development proposals that will be enabled by the proposed action. **Table 1-7b** presents a list of these anticipated reviews, permits and approvals.

Table 1-7b
REVIEWS, PERMITS AND APPROVALS REQUIRED
Future Site-Specific Applications

Agency/Entity	Review, Permit/Approval Required
Village Board of Trustees	Rezoning Approval
	SEQRA Process administration
Village Planning Board	Site Plan review
Village Building Department	Building permit
SCDHS*	Water Supply approval
	Sanitary System approval
SCPC	General Municipal Law Section 239m review
SCDPW*	Roadwork Access Authorization
SCWA	Water Supply approval
NYSDEC	SPDES* GP 0-10-001 General Permit
NYSDOT*	Roadwork Access Authorization

* SCDHS-Suffolk County Department of Health Services; SCDPW-Suffolk County Department of Public Works; NYSDOT-New York State Department of Transportation; SPDES-State Pollutant Discharge Elimination System.

SECTION 2.0

NATURAL ENVIRONMENTAL RESOURCES

2.0 NATURAL ENVIRONMENTAL RESOURCES

Impacts associated with adoption of a new zoning code primarily involve public policy related changes in terms of directing new development and redevelopment in conformance with the goals set by the village through zoning. The direct impact of the new proposed zoning code is identified in **Section 1.4**, which summarizes the potential uses and yields that could occur under existing zoning as compared to proposed zoning. It is the change in development potential that is appropriate for analysis in a DGEIS.

The following sections provide a baseline of the natural resources of the Village of Mastic Beach, from a village-wide perspective. Understanding of the village's natural resources allows for an assessment of the potential impact of changes that could occur when comparing the difference between existing and proposed development as a function of the adoption of the new zoning code.

A general overview of the environmental character of Mastic Beach will assist in the discussion of specific resources. Prior to its incorporation in 2010, Mastic Beach was a hamlet of the Town of Brookhaven. Much of the hamlet was subdivided and roads were constructed to access small lots sold for summer recreational opportunities in the early part of the 20th century. Seasonal bungalows were constructed and used primarily during summers. Over time, bungalows were converted for year-round use and the seasonal community became a permanent residency for families seeking a more rural, and later a more suburban lifestyle. The Mastic Beach Property Owners Association (MBPOA) was created in 1928 to assist in guiding the area as it developed. Mastic has evolved into a vibrant community with housing, support businesses, community services and many amenities. The pattern of small lot development created by the small lot subdivisions has lead to fairly well developed condition as far as community character. This character is a function of small roads constructed in many areas in a grid pattern, homes and businesses and established landscaping.

The southern mastic peninsula is less developed, due in large part to the environmental conditions associated with development constraints. These areas border marine surface waters and tidal wetlands associated of the bay (Narrow Bay) between Bellport Bay to the west and Moriches Bay to the east. A number of creeks extend into the peninsula from the bay; from west to east these include: Unchachogue, Johns Neck Creek, Sheeppen Creek, Pattersquash Creek, The Lagoon, Lawrence Creek, the Forge River and Home Creek, with Lone Creek and Poospatuck Creeks extending west from the Forge River into the peninsula to the north and outside of the village. As the grid road pattern was continued southward, dirt roads were created and fill was used to make these wetter areas more buildable. The current condition in these areas is one of intermittent development, and past disturbance and fill has created wetlands dominated by Common Reed (Phragmites australis), an invasive plant that can dominate disturbed areas and tolerates both wet and dry soils. Other areas where there is daily tidal inundation and less prior disturbance exhibit quality high marsh (dominated by Spartina patens, or Salt Marsh Hay), and intertidal marsh (dominated by Spartina alterniflora, or Low Marsh Cordgrass). There are also areas of freshwater wetlands in some of the less disturbed inland creek areas and where high groundwater conditions and lack of tidal inundation allow freshwater tolerant plants to exist. These natural areas provide a unique aspect to the character of Mastic Beach in complement of

the built environment.

The following sections further characterize Mastic Beach for the purpose of assessing potential impacts of the proposed adoption of the zoning code for the village.

2.1 Topography

2.1.1 Existing Conditions

The developed condition of the village indicates that the natural topography has been substantially modified such that there are limited natural surface features (such as natural swales and streambeds) remaining within the village. Long Island's south shore is within the glacial outwash plain created by the southward cascade of meltwater during glacial retreat which resulted in deposition of well-sorted glacial sediments with little topographic relief. Slopes within the village range from zero to two percent. The highest ground elevation in the village is an estimated 25 feet above sea level ("asl"), found in the northernmost corner of the village, in the vicinity of Quay Avenue (see **Figure 2-1**). The lowest elevations (5 feet asl) are located throughout the entire southern portion of the village, along the shorelines of Narrow Bay and Moriches Bay. Thus, total relief (the difference between highest and lowest elevation) in the village is approximately 20 feet. The village slopes gently downward from north to south.

The land surface of the village reflects the developed conditions that are present. With the exception of areas of undisturbed wetlands found along the shorelines and in some interior areas of the village, the land surface has been modified with filled areas as well as excavation for roads, basements and utility trenches (water, sewer, and stormwater conveyance systems), parking lot grading and other development-related alterations. Localized low points exist or have been created on roadways throughout the village to allow stormwater to naturally recharge or to direct stormwater to drainage inlets for recharge or conveyance to discharge locations within the village. Some areas are subject to flooding due to low topography and high groundwater conditions and lack of drainage infrastructure. In general, the topographic character of the village is flat and does not constrain use of land other than the noted high groundwater conditions.

2.1.2 Anticipated Impacts

Adoption of the proposed action is a regulatory action and would not result in any physical changes to the village; therefore, no impact to topographic resources would occur.

Table 1-6 indicates that the difference between the yields of the existing and proposed zonings is that the proposed zoning would result in 4 more residences, 38,775 SF of commercial space and 3,526 SF of industrial space. Given the current topographically flat and developed nature of the majority of the village, significant amounts of grading and changes to topography are not expected to result from construction related to this amount of development. That is, there is little

difference between the amounts of grading that would result from the two development scenarios. Either development scenario would result in localized impacts to topographic resources in the village, from excavations for building foundations and utility connections and systems, and for roadway foundations and parking areas. However, due to the low relief of the village, and absence of natural topographic features, major grading operations (cut and fills) are not anticipated to be necessary for land use and development which may occur over time in conformance with zoning.

Depending upon the area intended for development, various measures are in place to assist in reducing potential topographic impacts. Lands proposed to be subdivided would be subject to subdivision review, and commercial land use would be subject to site plan review. Lot development for homesites would be subject to building permit review. In all cases, site development, grading, erosion control/protection and construction methodology can be reviewed through the land us approval and/or permit process to ensure that localized topographic impacts are minimized. Larger projects that involve more disturbance of land would be subject to more extensive requirements for pre- and post-construction erosion control and stormwater management through drainage infrastructure. Site-specific Stormwater Pollution Prevention Plans ("SWPPP") will be prepared for the development of each property involving an acre or more of disturbance. The SWPPP must include a detailed erosion and sediment control plan to provide methods for sediment trapping, soil stabilization and best management practices to reduce the extent of soils exposed to elements. The erosion control and phasing plans will be required to utilize the NYSDEC Guidelines for Urban Erosion and Sediment Control, and include measures such as:

- Silt fence, storm drain inlet protection, soil traps, settling basins & housekeeping procedures.
- Staging locations for construction equipment and vehicles.
- Provisions to prevent soil on truck tires from being tracked onto the public road system.
- Temporary stabilization measures for stockpiles and as grades are stabilized.
- Weekly inspections of erosion controls to ensure proper installation and maintenance of erosion controls.

Additionally, the SWPPP must include measures to manage stormwater generated on-site during construction activities, and provide water quality and flood control for post construction conditions. The proposed drainage system must be designed to meet the requirements of the 2010 NYS Stormwater Management Design Manual ("Design Manual"), and village drainage engineering requirements. These requirements ensure that stormwater runoff is not permitted to discharge to adjacent properties.

No significant long-term adverse impacts are expected with respect to topography, as much of the village is currently developed and topographically flat. Areas where development could occur would be subject to subdivision, site plan and/or building permit review, and grading plans will be prepared and reviewed to minimize the area and volume of disturbance. Short-term impacts will be controlled by proper grading, erosion control, construction inspection and management, and site stabilization techniques consistent with NYSDEC and village requirements. It is noted that development will occur with or without the adoption of new

zoning for the village, and that localized impacts will also be controlled in either case.

2.1.3 Proposed Mitigation

- Subdivision, site plan and building permit review will be performed as appropriate in connection with proposed use of land.
- Individual land use applications will be subject to site-specific SEQRA review under Part 617.
- Erosion control and construction phasing plans will be prepared for individual site developments during land use application and permit review (as appropriate and necessary), that will specify the methods to be utilized during construction to control transport of sediment and stormwater runoff during construction activities.

2.2 Surface and Subsurface Soils

2.2.1 Existing Conditions

Surface Soils

The village is occupied almost completely by modified soils and developed surfaces of pavement, building coverages, and landscaping. The United States Department of Agriculture Soil Survey of Suffolk County, New York provides a categorization, mapping and description of soil types found in Suffolk County (see **Figure 2-2**). According to the Soil Survey, the village is underlain by twenty (20) individual soil types; **Table 2-1** presents the limitations on development posed by the soils present in the village.

Table 2-1
SOIL LIMITATIONS

Parameter	**Atsion Sand** (At)	**Beaches** (Bc)	**Berryland Mucky Sand** (Bd)
Suitability as a source of:			
Topsoil	Poor: seasonal high water table; coarse texture	---	Poor: prolonged high water table; coarse texture
Fill material	Fair: underwater excavation; needs binder in places	---	Fair: underwater excavation; needs binder in places
Soil features affecting:			
Highway location	Seasonal high water table	---	Prolonged high water table
Embankment foundation	Strength generally adequate for high embankments; slight settlement	---	Strength generally adequate for high embankments; slight settlement
Foundations for low buildings	Seasonal high water table; low compressibility; large settlements possible under vibratory loads	---	Prolonged high water table; low compressibility
Farm ponds (reservoir)	Seasonal high water table; rapid permeability	---	Prolonged high water table; rapid permeability
Irrigation	Very low available moisture capacity; rapid water intake	---	Prolonged high water table; very low available moisture capacity; rapid water intake
Limitations of the soil for:			
Sewage disposal fields	Severe: seasonal high water at depth of ½ to 1-1/2 feet	Severe: high water	Severe: prolonged high water table above a depth of ½ foot
Homesites			
Streets and parking lots	Moderate: seasonal high water at depth of ½ to 1-1/2 feet		
Lawns, landscaping and golf fairways	Severe: sandy surface layer; seasonal high water at depth of ½ to 1-1/2 feet		
Paths and trails	Moderate: seasonal high water at depth of ½ to 1-1/2 feet		
Athletic fields and intensive play areas	Severe: sandy surface layer; seasonal high water at depth of ½ to 1-1/2 feet		

Table 2-1 (cont'd)
SOIL LIMITATIONS

Parameter	**Carver and Plymouth Sands** (CpA & CpC)	**Cut and Fill Land** (CuB)	**Deerfield Sand** (De)
Suitability as a source of:			
Topsoil	Poor: coarse texture	---	Poor: coarse texture
Fill material	Good: needs binder in places	---	Good: underwater excavation necessary in places; needs binder in places
Soil features affecting:			
Highway location	Poor trafficability; extensive cuts and fills likely on CpC	---	Seasonal high water table
Embankment foundation	Strength generally adequate for high embankments; slight settlement	---	Strength generally adequate for high embankments; slight settlement
Foundations for low buildings	Low compressibility; large settlement possible under vibratory load	---	Low compressibility; large settlement possible under vibratory load ; seasonal high water table
Farm ponds (reservoir)	Rapid permeability; moderate and moderately steep to steep slopes on CpC	---	Seasonal high water table; rapid permeability
Irrigation	Very low available moisture capacity; rapid water intake; moderate and moderately steep to steep slopes on CpC	---	Seasonal high water table; very low available moisture capacity; rapid water intake
Limitations of the soil for:			
Sewage disposal fields	CpA-Slight; CpC-Slight to moderate; slopes in places	Slight	Moderate: seasonal high water table at depth of 1-1/2 to 2 feet
Homesites			
Streets and parking lots	CpA-Slight; CpC-Moderate to severe; slopes	Moderate: slopes	
Lawns, landscaping and golf fairways	CpA-Severe; sandy surface layer; CpC-Severe; sandy surface layer	Severe: sandy surface layer	Severe: sandy surface layer
Paths and trails		Moderate: sandy surface layer	
Athletic fields and intensive play areas			

Table 2-1 (cont'd)
SOIL LIMITATIONS

Parameter	**Fill Land, Dredged Material** (Fd)	**Gravel Pits** (Gp)	**Muck** (Mu)
Suitability as a source of:			
Topsoil	---	---	---
Fill material	---	---	---
Soil features affecting:			
Highway location	---	---	---
Embankment foundation	---	---	---
Foundations for low buildings	---	---	---
Farm ponds (reservoir)	---	---	---
Irrigation	---	---	---
Limitations of the soil for:			
Sewage disposal fields	Moderate: water table within a depth of 4 feet of surface in places	Variable; no interpretations made	Severe: prolonged high water table above depth of ½ foot
Homesites	Variable		Severe: prolonged high water table above depth of ½ foot; poor stability
Streets and parking lots	Variable		Severe: prolonged high water table above depth of ½ foot with some ponding
Lawns, landscaping and golf fairways	Severe: sandy surface layer		
Paths and trails			Severe: prolonged high water table above depth of ½ foot
Athletic fields and intensive play areas			

Table 2-1 (cont'd)
SOIL LIMITATIONS

Parameter	**Plymouth Loamy Sand** (PlA & PlB)	**Riverhead Sandy Loam** (RdA & RdB)	**Riverhead and Haven Soils** (RhB)
Suitability as a source of:			
Topsoil	Poor: coarse texture	Good	---
Fill material	Good: material below a depth of 27 inches needs binder in places	Good: material below a depth of 27 inches needs binder in places	---
Soil features affecting:			
Highway location	---	---	---
Embankment foundation	Strength generally adequate for high embankments; slight settlement	Strength generally adequate for high embankments; slight settlement	---
Foundations for low buildings	Low compressibility	Low compressibility	---
Farm ponds (reservoir)	Rapid permeability	Rapid permeability in substratum	---
Irrigation	Very low available moisture capacity	Moderate to rapid water intake; moderate available moisture capacity	---
Limitations of the soil for:			
Sewage disposal fields	PlA-Slight; PlB-Slight	RdA-Slight; RdB-Slight	Slight
Homesites			
Streets and parking lots	PlA-Slight; PlB-Moderate; slopes	RdA-Slight; RdB-Moderate; slopes	Moderate: slopes
Lawns, landscaping and golf fairways	PlA-Severe; sandy surface layer; PlB-Severe; sandy surface layer	RdA-Slight; RdB-Slight	Slight
Paths and trails	PlA-Moderate; sandy surface layer; PlB-Moderate; sandy surface layer		
Athletic fields and intensive play areas	PlA-Moderate; sandy surface layer; PlB-Moderate; sandy surface layer; slopes	RdA-Slight; RdB-Moderate; slopes	

Table 2-1 (cont'd)
SOIL LIMITATIONS

Parameter	**Sudbury Sandy Loam** (Su)	**Tidal Marsh** (Tm)	**Urban Land** (Ur)
Suitability as a source of:			
Topsoil	Good: seasonal high water table	---	---
Fill material	Good: underwater excavation necessary in places; material below a depth of 24 inches needs binder in places	---	---
Soil features affecting:			
Highway location	Seasonal high water table	---	---
Embankment foundation	Strength generally adequate for high embankments; slight settlement	---	---
Foundations for low buildings	Seasonal high water table low compressibility	---	---
Farm ponds (reservoir)	Seasonal high water table; rapid permeability in substratum	---	---
Irrigation	Seasonal high water table; moderate to rapid water intake; moderate available moisture capacity	---	---
Limitations of the soil for:			
Sewage disposal fields	Moderate: seasonal high water table at depth of 1-1/2 to 2 feet	Severe; high water table	Variable; no interpretations made
Homesites			
Streets and parking lots			
Lawns, landscaping and golf fairways	Slight		
Paths and trails			
Athletic fields and intensive play areas			

Table 2-1 (cont'd)
SOIL LIMITATIONS

Parameter	**Walpole Sandy Loam** (Wd)	**Wareham Loamy Sand** (We)
Suitability as a source of:		
Topsoil	Good; seasonal high water table	Poor: coarse texture; seasonal high water table
Fill material	Good below a depth of 26 inches; underwater excavation necessary	Fair: underwater excavation necessary; till layers generally contain sufficient binder
Soil features affecting:		
Highway location	Seasonal high water table	Seasonal high water table
Embankment foundation	Strength generally adequate for high embankments; slight settlement	Strength generally adequate for high embankments; slight settlement
Foundations for low buildings	Seasonal high water table; low compressibility	Seasonal high water table; low compressibility
Farm ponds (reservoir)	Seasonal high water table; rapid permeability in substratum	Seasonal high water table; rapid permeability
Irrigation	Seasonal high water table; moderate to rapid water intake; moderate available moisture capacity	Seasonal high water table; rapid water intake; very low available moisture capacity
Limitations of the soil for:		
Sewage disposal fields	Severe: seasonal high water table at depth of ½ to 1-1/2 feet	Severe: seasonal high water table at depth of ½ to 1-1/2 feet
Homesites		
Streets and parking lots	Moderate: seasonal high water table at depth of ½ to 1-1/2 feet	Moderate: seasonal high water table at depth of ½ to 1-1/2 feet
Lawns, landscaping and golf fairways		Severe: seasonal high water table at depth of ½ to 1-1/2 feet
Paths and trails		Moderate: seasonal high water table at depth of ½ to 1-1/2 feet
Athletic fields and intensive play areas	Severe: seasonal high water table at depth of ½ to 1-1/2 feet	Severe: seasonal high water table at depth of ½ to 1-1/2 feet

Subsurface Soils

Long Island is located within the Atlantic Coastal Plain, a physiographic province in which substantial sediment deposits overlie the base, or bedrock. The surface topography primarily reflects the glacial history of the Island and subsequent human activity.

Figure 2-3 depicts a generalized cross-section of the subsurface conditions beneath the village. As can be seen, the village is underlain by bedrock that lies at an elevation of about 1,800 feet below sea level (bsl) beneath the village. The bedrock slopes downward in a southerly and easterly direction at a rate of approximately 70 feet per mile, and the overlying sediments increase in thickness toward the south. These younger sediments are named (from deeper/older to shallower/younger), the Raritan and the Magothy and Formations. The Raritan Formation is composed of both sandy (i.e., pervious to the flow of groundwater) and clayey (i.e., relatively impervious to groundwater) layers, while the Magothy Formation is a mix of interbedded sand and clay layers. The sandy components of these formations contain groundwater, from which Long Island draws its drinking water (see **Section 2.3.1**); these components are known as "aquifers", and are named the Lloyd and Magothy Aquifers. The third Long Island aquifer, the Upper Glacial Aquifer, lies atop the Magothy Formation, and is the youngest and shallowest deposit on the Island. The sediments of the Raritan and Magothy Formations were deposited atop the above-described bedrock between 138 and 65 million years ago, and are the result of sediment transport from highlands to the north of the Island.

The Raritan Formation consists of two members: the Lloyd Sand and the Raritan Clay. The Lloyd Sand is deeper, and contains the Lloyd Aquifer, which is separated from the overlying Magothy Aquifer by the low-permeability Raritan Clay. The upper altitude of the Lloyd Sand is approximately 1,450 feet bsl indicating a thickness of 350 feet, and the top of the Raritan Clay is approximately 1,250 feet bsl, indicating a thickness of 200 feet. Beneath the village, the upper altitude of the Magothy Aquifer is approximately 250 feet bsl, indicating a thickness of 1,000 feet. Finally, atop the Magothy deposits are the Upper Glacial Aquifer and the surface soils described above.

During the Tertiary period (65 to 2 million years ago) there was erosion of the Magothy deposits over much of Long Island due to hydrologic processes such as stream formation. Sea level was low, and a large valley formed north of Long Island in what is now Long Island Sound. Most of the surface sediments now evident on Long Island were deposited during a period of cyclic glacial advances and retreats, while occurred between 2 million and 10,000 years ago. This epoch was marked by creation of moraines and deposition of glacial outwash sediments on top of the Magothy deposits. These younger sediments, which consist of clay, silt, sand, gravel, and boulders, include both the Gardiners Clay and the Upper Glacial Aquifer. The Ronkonkoma and Harbor Hills Terminal Moraines were created as part of this Upper Glacial period along the spine and the North Shore of Long Island as the glaciers retreated, approximately 25,000 to 10,000 years ago. Low, flat outwash plains formed southward as erosional processes carried sediments away from the moraines, and coastal processes formed barrier beaches along the south shore as sea level rose.

2.2.2 Anticipated Impacts

Surface Soils

Adoption of the proposed action is a regulatory action, and so would not result in any physical changes to the village, and so no impact to soil resources would occur.

Table 1-6 indicates that the difference between the yields of the existing and proposed zonings is that the proposed zoning would result in 4 more residences, 38,775 SF of commercial space and 3,526 SF of industrial space. Either development scenario would result in impacts to soil resources but, given the developed nature of the village, significant levels of impact to surface soils from grading are not expected from this amount of development. That is, there is no significant difference between the amounts of grading that would result from the two development scenarios, so that there would be no significant difference in the associated impacts to soil resources.

Surface soils are mapped within the village and can be considered on a site-by-site basis at the time of a land use application. The subdivision, site plan and building permit review process will allow for a site specific review of soil constraints should such be present. It is noted that the most constrained soils are associated with low lying areas containing tidal and freshwater wetlands. Soil types with severe limitations for homesites include: Atsion Sand, Beaches, Berryland Mucky Soil, Tidal Marsh, Walpole Sandy Loam and Wareham Loamy Sand. Development in such areas will likely be constrained for high groundwater, wetland, flooding and related issues. Any use in these areas should be carefully examined at the time development is proposed.

Clearing operations would include excavations of subsurface soils for building foundations and utility connections and systems, and for roadway foundations and parking areas; these issues are appropriately discussed below, in relation to *subsurface soils*.

Subsurface Soils

Adoption of the proposed action is a regulatory action, and so would not result in any physical changes to the village, and so no impact to subsurface soil resources or subsurface conditions would occur.

Either development scenario would result in impacts to subsoils, from excavations for building foundations and utility connections and systems, and for roadway foundations and parking areas. However, due to the relatively small difference in yields of the two scenarios (the proposed zoning would result in 4 more residences, 38,775 SF of commercial space and 3,526 SF of industrial space than the existing zoning), there would be little difference between the impacts.

It is acknowledged that a relatively low level of impact to subsurface soils would occur from excavations for building foundations, roadbeds, parking lots, utility trenches, and the like. However, the low relief of the village and shallow depth to groundwater, particularly in the southern portions of the village (less than 5 foot in elevation; see **Section 2.3.1**), would tend to minimize the depth of such excavations and grading, so that significant impacts on subsurface

soils is not expected. That is, these two factors would tend to preclude major grading operations (i.e., deep cuts and fills) associated with new construction, as the flat topography would obviate the need for extensive cuts and fills, and the close proximity of groundwater would minimize the likelihood for development that would require deep excavations (with its attendant costs and permitting).

Nevertheless, for larger proposals requiring deeper foundations or grading, dewatering may be necessary. It is noted that dewatering would be a temporary measure for the installation of building footings or other subsurface structural support during construction. Should dewatering be necessary, all appropriate regulations will be observed and necessary permits obtained. For dewatering operations drawing less than 45 gallons per minute ("gpm"), no permitting would be necessary; however, for dewatering operations drawing 45 gpm or more, a Long Island Wells Permit is required from NYSDEC. A temporary dewatering system is considered a "Minor Permit." The NYSDEC permit requires information pertaining to use, capacity, duration and impact on water supplies, as well as location maps and construction drawings.

Native soils encountered during pre-construction engineering evaluations may be considered suitable for reuse as load-bearing fill material, as long as proper compaction is undertaken, as specified by the supervising engineer during construction. Techniques including deep compaction or over-excavation and replacement of unsuitable fill materials may be utilized in the event that unsuitable fill materials are found on properties proposed for development. Fill materials may include, but not limited to: fill soils, concrete, bricks, stone, rebar, pipes, asphalt, ash, construction and demolition debris, scrap metal, and wood. Materials encountered that are unsuitable for reuse as fill would be removed from the site for proper disposal at an appropriate landfill. The development areas would be stabilized, as determined by a geotechnical engineer, prior to construction of structural elements.

Specific subsurface conditions will be determined in detail as part of the subdivision, site plan and building permit review of each application. Test borings and test holes would be installed during the early stages of review to determine the subsoil characteristics and any particular design constraints. There are measures available to remove poorly drained soils and backfill good leaching material around drainage and sanitary system leaching structures. The drainage system and sanitary system designs will be reviewed in detail by the village (along with general engineering review) as part of this process, as well as the Suffolk County Department of Health Services for sanitary system installation. The final land use approval will not occur unless it is demonstrated that the sanitary and drainage systems, as well as structural designs, will operate properly and safely. Thus, the land use application review and approval process will establish that subsurface conditions would not cause a significant adverse environmental impact.

As construction design generally provides for the on-site reuse of excess soil material for fill (in order to minimize the cost of removal/disposal as well as impacts from removal operations), the total amount of excess soil that must be removed from construction sites would be minimized. This would minimize the potential for adverse dust impacts on neighboring sites, and for noise, dust and traffic-related impacts on roadways due to truck movements.

2.2.3 Proposed Mitigation

- Test borings and test holes will be completed in the early stages of review to determine subsoil characteristics. Agency design review during the subdivision, site plan and building permit plot plan approval process will assist in ensuring that site specific conditions are addressed at the time of development.
- If unsuitable subsoils are found, techniques including deep compaction or over-excavation and replacement of unsuitable fill materials may be utilized. Development areas would be stabilized, as determined by a Geotechnical Engineer, prior to construction of structural elements.
- Erosion control and construction phasing plans will be prepared for individual site developments during site plan review that will specify the methods to be utilized during construction to control transport of sediment and stormwater runoff during construction activities.
- Prior to the initiation of construction activities, remediation of sites where recognized environmental conditions have been identified will be necessary. Remediation activities are required to be completed according to the protocols, procedures, standards and documentation requirements of the appropriate supervising entity, such as SCDHS and/or NYSDEC.
- Individual land use applications will be subject to site-specific SEQRA review under Part 617.

2.3 Groundwater and Surface Water

2.3.1 Existing Conditions

Groundwater

Long Island has been designated a sole source aquifer region by the Federal government, which means that groundwater is the single source of water for public water supply. This designation recognizes the fact that surface uses and activities (such as spills of toxic or hazardous substances as well as recharge of lawn fertilizers, sanitary and drainage system effluents, etc.) have the potential to adversely impact an aquifer and hence, the quality of groundwater that is used for public water supply. This establishes the importance of land use controls to ensure that such impacts do not occur. There are three major aquifers under Long Island (named at increasing depths; see **Figure 2-3**): the Upper Glacial, the Magothy and the Lloyd. The Upper Glacial and Magothy aquifers are the most significant water supply sources for most of Long Island.

According to the 2009 USGS Report, the water table (i.e., the upper surface of the Upper Glacial Aquifer, which is the topmost of the three saturated geologic deposits of groundwater beneath the village) varies from a maximum of about 10 feet asl in the northernmost portion of the village in the vicinity of Quay Avenue, to a minimum of about 0 feet asl in the southernmost

portions of the village along its shorelines (see **Figure 2-4**). In consideration of the variation in surface elevations in this area, the depth to the water table is therefore between 15 feet beneath the village's high point (near Quay Avenue) and 1ess than 5 feet in the southern portion of the village along and near its shorelines. **Figure 2-4** also indicates that the direction of flow in the Upper Glacial Aquifer (the aquifer nearest the ground surface) is radially outward and down-gradient from its high point near Quay Avenue, varying from southwesterly to east-southeasterly.

Given that Long Island is a sole source aquifer, a number of planning studies have been prepared to provide recommendations and guidance in management of groundwater resources. Several of the studies relevant to the village are summarized below.

Public Water Supply and Water Quality

Drinking water within the Study Area is supplied by the SCWA. There are no SCWA public supply wellfields in the village; the village is within Distribution Area #20. The SCWA regularly monitors water quality from its supply wells, which provide localized information on groundwater quality. **Table 2-2** presents the SCWA's 2012 Drinking Water Quality Report for this Distribution Area. The data indicates that, for those substances tested for which an MCL exists, no exceedences occurred. Further, no synthetic organic compounds (e.g., pesticides, herbicides, pharmaceuticals & personal care products), and no VOCs were detected. Finally, only four (4) of the eleven (11) disinfection by-products were detected, of which none exceeded their MCLs. It is noteworthy that nitrates were detected at a concentration of 0.49 mg/l, which is well within the NYS Drinking Water standard of 10 mg/l, which indicates that groundwater used for water supply purposes in the area serving the village is of exceptional quality.

Table 2-2
GROUNDWATER QUALITY DATA, 2012
Distribution Area #20, SCWA

Parameter	Average Value	Maximum Contaminant Limit (MCL)
Inorganics		
Alkalinity, total mg/l	34.7	n/a
Aluminum, mg/l	0.04	n/a
Ammonia, free mg/l	ND	n/a
Antimony, µg/l	ND	6
Arsenic, µg/l	ND	10
Barium, mg/l	ND	2
Boron, mg/l	ND	n/a
Bromide, mg/l	ND	n/a
Cadmium, mg/l	ND	5
Calcium, mg/l	12.4	n/a
CO_2, calculated mg/l	4.1	n/a
Chloride, mg/l	11.1	250
Chromium, µg/l	ND	100
Cobalt-59, µg/l	ND	n/a
Color, color units	ND	15

Copper, mg/l	0.04	AL=1.3
Dissolved solids, total mg/l	81	n/a
Fluoride, mg/l	ND	2.2
Hardness, total mg/l	38.8	n/a
Iron, µg/l	267	300
Lead, µg/l	ND	AL=15
Lithium, µg/l	3.0	n/a
Magnesium, mg/l	1.88	n/a
Manganese, µg/l	13	300
Molybdenum, µg/l	ND	n/a
Nickel, µg/l	ND	100
Nitrate, mg/l	0.49	10
Perchlorate, µg/l	1.15	18
Phosphate, total mg/l	0.98	n/a
pH	7.3	n/a
pH, field pH units	7.3	n/a
Potassium, mg/l	0.80	n/a
Silicon, mg/l	5.5	n/a
Sodium, mg/l	7.4	n/a
Specific conductance, µmho/cm	130	n/a
Strontium-88, mg/l	0.04	n/a
Sulfate, mg/l	7.5	250
Surfactants, anionic, mg/l	ND	0.5
Temperature, field ºCentigrade	12	n/a
Tin, µg/l	ND	n/a
Titanium, µg/l	ND	n/a
Total Organic Carbon (TOC), mg/l	0.40	n/a
Turbidity, NT units	ND	5
Vanadium, µg/l	ND	n/a
Zinc, µg/l	ND	5
Synthetic Organic Compounds: Pesticides, Herbicides, Pharmaceuticals & Personal Care Products*		
Volatile Organic Compounds*		
Disinfection By-Products**		
Chlorine residual, mg/l	0.8	4
Chloroform, mg/l	0.7	80
Haloacetic Acids total, µg/l	0.9	60
Trihalomethanes, total, µg/l	3.6	80

Source: 2012 SCWA Drinking Water Quality Report for Distribution Area #20.

* None detected.

** No others detected.

ND - Not detected.

n/a - No standards for parameter

AL - Action Level.

Localized water quality issues may exist where high density development is present. Article 6 of the SCSC requires residences on lot sizes of 40,000 SF or more in Groundwater Management

Zone VI, which includes the Village of Mastic. Higher densities may lead to elevated concentrations of nitrogen in groundwater unless sewage treatment is provided. Sewage treatment is not available for the majority of Mastic Beach, and as a result, it is expected that elevated nitrogen is present in the shallow aquifer. Other sources of contamination would not be expected to cause widespread water quality issues. Potential oil spills or chemical release would relate to specific incidents or spills and such incidents must be reported to the NYSDEC and/or SCDHS for response, remediation and monitoring if necessary. As noted, Mastic Beach is served by public water supply, and as a result, there are no significant health implications with respect to groundwater quality.

Surface Water

There are no inland, isolated surface water bodies (e.g., lakes or ponds) in the Village of Mastic Beach other than the streams, creeks and lagoons noted previously. The NYSDEC and NWI (National Wetland Inventory) have mapped significant areas of freshwater and tidal (salt water) wetlands in the village, as shown in **Figures 2-5 and 2-6**, respectively. All of the tidal wetlands are associated with the shorelines on Narrow Bay and Moriches Bay and the lower reaches of the various creeks and canals, while all of the freshwater wetlands are found at and around the upper reaches of the creeks and somewhat inland of these areas.

Stormwater runoff generated within the village eithers recharges in-place or runs off on the ground surface in a downslope direction, where it reaches a paved surface served by a drainage system, evaporates, or recharges if on a pervious surface. Flooding conditions may occur during excessive precipitation events and during high tide or tidal flooding situations.

Figure 2-7 is a map indicating the boundary of the area within the village that is subject to flooding, as determined by the Federal Emergency Management Agency (FEMA) Flood Hazard Zone maps. As can be seen, the entire southern portion of the village abutting Narrow Bay, Moriches Bay, and the areas abutting the various creeks and inlets have a 0.2% annual chance of flooding (delineated by the X500 boundary).

Water Resource Plans

Long Island Comprehensive Waste Treatment Management Plan (the "208 Study") - The Long Island Regional Planning Board, in conjunction with other agencies, prepared a management plan for Long Island groundwater resources in 1978 under a program funded by Section 208 of the 1972 Federal Water Pollution Control Act Amendments. The purpose of the 208 Study was to investigate waste disposal options and best practice for ground and surface water protection. The study delineated Hydrogeologic Zones for the formulation of management plans based on groundwater flow patterns and quality. The subject site is located in Hydrogeologic Zone VI, a zone of generally shallow groundwater levels, with horizontal flow, which has impacts on surface waters.

The 208 Study provided the basis for designation of Groundwater Management Zones and adoption of Article 6 of the SCSC which limits development densities to less than one (1) unit per acre. This was codified by SCDHS in 1980, and is a form of development restriction that is necessary for best groundwater management practice.

The 208 Study confirmed that contaminants accumulate or are disposed of on land and developed surfaces, and that stormwater runoff is the vehicle by which pollutants move across land and through the soil to reach and impact groundwater and/or surface waters. Sources of contaminants include:

- animal wastes
- highway deicing materials
- decay products of vegetation and animal matter
- fertilizers
- pesticides
- air-borne contaminants deposited by gravity, wind or rainfall
- general urban refuse
- by-products of industry and urban development
- improper storage and disposal of toxic and hazardous material

The following 208 Study Recommendations apply to either the proposed action or to the proposed zoning:

Structural Recommendations

1. Due to the impact of groundwater underflow and stream flow in this area on the sensitive eastern Great South Bay, collection and treatment is required at densities of one or more dwelling units per acre.
2. Require advanced wastewater treatment with nitrogen removal for treatment plants recharging effluent to ground or surface waters.

Non-Structural Recommendations

1. Minimize population density by encouraging large lot development (one dwelling unit per two or more acres) where possible, to protect the groundwater and surface water from future pollutant loadings, and to provide additional protection for existing marsh and wetland areas.
4. Provide for routine maintenance of on-site disposal systems.
5. Reduce the use of fertilizers on turf. Promote the use of low-maintenance lawns.

Nationwide Urban Runoff Program (NURP) Study - In 1982, the Long Island Regional Planning Board prepared the Long Island Segment of the Nationwide Urban Runoff Program (the "NURP" Study). The purpose of the NURP Study was to determine:

- the source, type, quantity, and fate of pollutants in stormwater runoff in recharge basins, and
- the extent to which these pollutants are, or are not attenuated as they percolate through the unsaturated zone.

The Study determined that stormwater runoff generated on impervious surfaces such as roads, driveways, roofs and sidewalks may carry such pollutants as heavy metals, petroleum hydrocarbons, bacteria, and nitrogen. Contaminants then accumulate or are disposed of on land and developed surfaces. Sources of contaminants include those noted in the 208 Study (see list of bulleted items above).

In order to accomplish its goals, the NURP Study selected five recharge basins, located in areas with distinct land use types, for intensive monitoring during and immediately following storm

events. The basins, three in Nassau County and two in Suffolk County, were chosen on the basis of type of land use from which they receive stormwater runoff. The following is a listing and description of each drainage area:

Site Location	Land Use
Centereach	Strip Commercial
Huntington	Shopping Mall, Parking Lot
Laurel Hollow	Low Density Residential (1 acre zoning)
Plainview	Major Highway
Syosset	Medium Density Residential (1/4 acre zoning)

Extensive monitoring of these representative sites found a significant reduction in these pollutants, indicating that they are attenuated in soil or volatilized in stormwater transport.

The Syosset area was deemed most similar to the medium-density residential use that dominates the village, and so is provided as an example of stormwater conditions resulting from this form of development. The NURP Study results for this representative land use type are shown in **Table 2-3**.

Table 2-3
STORMWATER IMPACTS FROM LAND USE NURP Study: Medium-Density Residential Site (Syosset)

Parameter	Medium Density	Standard
Spec. Cond (umhos)	104	[n]
pH	5.1	6.5-8.5
Turbidity (NTU)	26.0	5
Hardness (mg/l)	16.5	[n]
Calcium (mg/l)	4.85	[n]
Magnesium (mg/l)	1.2	[n]
Sodium (mg/l)	4.25	[n]
Potassium (mg/l)	1.0	[n]
Sulfate (mg/l)	7.05	250
Fluoride (mg/l)	0.01	1.5
Chloride (mg/l)	7.3	250
Nitrogen-Total (mg/l)	0.39	10
Phosphorus (mg/l)	0.01	[n]
Cadmium (ug/l)	2.5	10
Chromium (ug/l)	1.0	50
Lead (ug/l)	6.0	50
Arsenic (ug/l)	1.0	25
Coliform (MPN)	13	[n]
Coliform, fecal	3	[n]

Source: Koppelman, 1982, p. 26-29. [n] - no standard for parameter

None of the parameters examined for the above table exceeded standards for the reported constituents, with the exception of turbidity. As expected, slightly elevated levels of heavy

metals were detected, due to entrainment of auto exhausts from roadways; however, these concentrations were significantly reduced through attenuation and did not exceed standards. Chloride concentrations generally increase by two orders of magnitude during the winter months. Chloride is not attenuated in soils like lead and chromium, and thus it is anticipated that the amount of chloride contributed to groundwater will be correlated with the amount of salt applied to roadways and parking areas within the stormwater drainage area. Finally, coliform and fecal streptococcal indicator bacteria are removed from stormwater as it infiltrates through the soil.

Based on the sampling program, the NURP Study reached nine (9) findings and conclusions, of which the following eight pertain to the proposed action project and/or the proposed zoning:

Finding 1: In the majority of storm events sampled, the ratio of the total volume of runoff to the volume of precipitation falling on impervious areas was less than one.

Conclusion: Most of the runoff into recharge basins is derived from rain that falls directly on impervious surfaces, except during storms of high intensity, high volume and/or long duration.

Finding 2: Stormwater runoff concentrations of most of the inorganic chemical constituents for which analyses were performed were generally low. In most cases, they fell within the permissible ranges for potable water; however, there were two notable exceptions:

- median lead concentrations in stormwater runoff samples collected at the recharge basin draining a major highway consistently exceeded the drinking water standards;
- chloride concentrations in stormwater runoff samples generally increase two orders of magnitude during the winter months.

Conclusion: In general, with the exception of lead and chloride, the concentrations of inorganic chemical measured in stormwater runoff do not have the potential to adversely affect groundwater quality.

Finding 3: In most instances where there was an influx of lead into a recharge basin, there was considerable attenuation before the stormwater runoff reached the water table. The influx of chromium was generally much smaller than that of lead. In 15 out of 23 storm events, the calculated chromium loads in runoff were higher than those in groundwater. There was little or no removal of chloride as the stormwater moved through the unsaturated zone beneath the recharge basin. Owing to the low nitrogen levels in the stormwater runoff, as compared to the background levels of nitrogen in groundwater on Long Island, it was impossible to determine the degree of nitrogen removal.

Conclusion: Infiltration through the soil is generally an effective mechanism for reducing lead and probably chromium from runoff on Long Island. Although the NURP Findings concerning chromium are not conclusive, data from an industrial spill in Farmingdale indicate attenuation. Chloride is not attenuated. The effect of infiltration on nitrogen is undetermined.

Finding 4: The number of coliform and fecal streptococcal indicator bacteria in stormwater range from 10^0 MPN [Most Probable Number] to 10^{10} MPN per acre per inch of precipitation.

Conclusion: Coliform and fecal streptococcal indicator bacteria are removed from stormwater as it infiltrates through the soil.

Finding 6: Median values of total recoverable lead in runoff samples ranged from 275 µg/l at the Plainview recharge basin, which drains a major highway, to 19 µg/l at he Laurel Hollow recharge basin, which drains a low density residential area containing only minor roadways. Between these two, in order of decreasing lead concentrations, were Centereach (strip commercial with major roadway), Huntington (parking lot) and Syosset (medium density residential with minor roadways).

Conclusion: Lead concentrations in runoff entering a recharge basin appear to be directly related to the extent and characteristics of the road network and the type and volume of traffic in the drainage area served by the basin.

Finding 7: Although the recharge basins at Laurel Hollow and Syosset both serve residential areas, some constituents found in the basin soil at these sites displayed differences that may be explained by the length of time each basin has been in use. In general, soil at the recently-constructed Laurel Hollow basin contained lower concentrations of lead and pesticides than did the soil at the Syosset basin, which was constructed in 1957.

Conclusion: In addition to land use, the length of time that a recharge basin has been in use appears to affect the concentration of some pollutants in the basin soil. The limit of the ability of the soil to adsorb or otherwise retain these constituents is unknown.

Finding 8: There was no discernable difference in the performance of the Centereach recharge basin that could be attributed to the presence of the permanent liner.

Conclusion: Plastic-lined basins with overflow to a recharge structure and unlined recharge basins are equally effective in recharging stormwater to the groundwater reservoir and in attenuating chemical constituents in stormwater.

Finding 9: Plant growth on a basin floor enhances infiltration because the plant root system keeps the sol layer loose and permeable, and provides channels for infiltrating water.

Conclusion: Removal of basin vegetation is not necessary, and may indeed decrease the infiltration rate.

Narrow Bay Floodplain Protection and Hazard Mitigation Plan - In 1997, the Suffolk County Department of Planning prepared the Narrow Bay Floodplain Protection and Hazard Mitigation Plan hereafter, (the Narrow Bay Plan). The Narrow Bay area on the Mastic/Shirley peninsula is highly susceptible to flooding, due to low elevation and proximity to the Fire Island barrier beach. As such, the plan evaluates potential impacts and various protection and mitigation measures resulting from severe storm events affecting properties - many of which were developed prior to the enactment of environmental protection regulations - situated within the Narrow Bay area.

According to the Narrow Bay Plan, significant portions of the village are within the AE Zone and have a depth to groundwater of less than 5 feet and, as such, are subject to flooding. Furthermore, portions of the village are anticipated to be flooded by Category 1 through 4 hurricanes.

2.3.2 Anticipated Impacts

Groundwater

Adoption of the zoning changes of the proposed action is a regulatory action, and so would not result in any physical changes to the village, and so no direct impact to groundwater resources would occur.

As development occurs under either existing or proposed zoning, the amount of stormwater runoff generated would be increased from its current volume, and consequently, the volume of recharge reaching the water table would be increased.

As noted in **Table 1-6,** the difference between the yields of the existing and proposed zonings is that the proposed zoning would result in 4 more residences, 38,775 SF of commercial space and 3,526 SF of industrial space. As the village is mostly developed, the relatively small difference in yields of the proposed zoning would not significantly change these impacts. That is, there would be little difference between the recharge volume and nitrogen concentration in recharge between conditions associated with build out under current zoning as compared with build out under proposed zoning.

Land use and development within the village would be subject to regulation under SCSC Article 6, which regulates the density of development where sanitary wastewater treatment systems are not available. Article 6 regulates subdivision of land, commercial site plan approval and individual lot development in terms of allowable design based on comparison of allowable flow with design flow. Subdivision of land requires 40,000 SF lots, and discharge of allowable flow is generally restricted to less than 300 gpd/acre. For comparison purposes, the design flow for a single family dwelling is 300 gpd, therefore, one unit per acre is generally required. An example of design flow for a commercial use is dry retail which has a design flow of 0.03 gpd/SF, as a result, 10,000 SF would have a flow of 300 gpd, which would be the maximum building size on an acre of land. Exceptions include existing uses which are generally "grandfathered" for the flow that was present prior to adoption of Article 6 in 1980. Also, buildable lots subdivided prior to 1980 would have a grandfathered flow of 300 gpd.

As a result, there are limitations on the amount and type of development that can occur without sewage treatment. Since sewage treatment is not expected to be available, this limits the build out of Mastic Beach, with or without the proposed zoning. The build out analysis included in **Section 1.4** did consider the land use implications of Article 6 of the SCSC. Given that any new development or redevelopment must conform to Article 6, significant adverse impacts to groundwater are not expected.

SCDHS also requires permits to construct new sanitary systems. Test holes for soil leaching properties are required, and conformance with SCDHS installation design standards is required. As a result, any new sanitary systems that are constructed would be expected to function properly for disposal of sanitary wastes.

The potential for adverse impacts to groundwater (in the Upper Glacial or deeper Magothy Aquifer) from accidental spills of toxic or hazardous substances would not be significantly changed by the proposed adoption of village zoning. New development would be subject to the requirements of SCSC Article 12, which controls the use, storage and disposal of toxic and hazardous substances.

Public Water Supply

Adoption of the zoning changes of the proposed action is a regulatory action, and so would not result in any physical changes to the village, and so no impact on the public water supply system would occur.

As indicated in the SCWA's 2012 Drinking Water Quality Report, no significant adverse water quality impacts to the groundwater supplied to the village's consumers have been detected. New construction associated with either the existing zoning or the proposed zoning will be required to conform to all applicable requirements for sanitary and drainage system design and operation, and so no impacts to groundwater quality are anticipated. In addition, the difference in the yields of the two scenarios shown in **Table 1-6** would not be large enough to significantly impact the ability of the SCWA to properly serve its existing customer base, while serving this new development. As a result, no significant adverse impacts to the public water supply are expected.

Surface Water

Adoption of the proposed action is a regulatory action, and so would not result in any physical changes to the village, therefore, no impact to surface water resources would occur.

Table 1-6 indicates that the difference between the yields of the existing and proposed zonings is that the proposed zoning would result in 4 more residences, 38,775 SF of commercial space and 3,526 SF of industrial space. As a result, the amount of stormwater runoff generated would be increased from its current volume, and consequently, the volume of runoff that could impact the village's freshwater and tidal wetlands would be increased. However, given the developed nature of the village, significant impacts to surface water bodies are not expected from this incremental amount of development.

The incremental amount of development would increase the amount of impervious surfaces in the village, due to the increased acreages of buildings and paved surfaces. As a result, the amount of stormwater runoff generated would be increased from its current volume. This new development will require that each drainage system be designed to accommodate all runoff generated on that site. In addition, conformance to the requirements of the NYSDEC Phase II Stormwater Regulations, as well as prevailing village and county regulations will be required. These requirements include water quality treatment of stormwater runoff prior to discharge to any conveyance system that may ultimately discharge to surface water. Given the requirements for on-site drainage retention and water quality treatment of stormwater runoff for new development within the village, it is anticipated that positive impacts to surface water quality would occur through the reduction of stormwater discharges that may impact down-gradient wetlands or surface waters of Narrow Bay, Moriches Bay or the creeks and inlets of those bodies. These system designs will be subject to the review and approval of appropriate village

and/or county engineering staff, ensuring that significant adverse impacts from stormwater runoff would not occur.

Water Resource Plans

Adoption of the zoning changes of the proposed action is a regulatory action, and so would not result in any physical changes to the village, and so no impact to the various water resource plans would occur.

Long Island Comprehensive Waste Treatment Management Plan (the "208 Study") - Land use under either existing or proposed zoning would conform to the recommendations of the 208 Study, as such development will be required to conform to SCSC Article 6 requirements for sanitary wastewater, and to applicable village and/or county requirements for stormwater runoff. As such, the difference in yields between the two development scenarios would not lead to significant impacts to water resources plans.

Nationwide Urban Runoff Program (NURP) Study - A review of the NURP Study results was conducted to assess the impact that may occur on groundwater quality underlying the village. The land use included in the NURP Study that correlates best with the proposed action is medium-density residential development, as evaluated by a site in Syosset. None of the parameters examined within the NURP Study exceeded standards for the reported constituents at the Syosset site, with the exception of turbidity. However, the level of this parameter is not expected to have a significant impact on the village, as turbidity is addressed by the water supplier before groundwater is sent into the distribution system. As expected, slightly elevated levels of heavy metals were detected; however, these concentrations were significantly reduced through attenuation and did not exceed standards.

The NURP Study found that chloride concentrations in stormwater generally increase by two orders of magnitude during the winter months. According to the NURP Study, chloride is not attenuated in soils like lead and chromium, and thus it is anticipated that the amount of chloride contributed to groundwater will be correlated with the amount of salt applied to roadways and parking areas within the stormwater drainage area, during winter months. Reduction or elimination of roadsalt would assist in reducing chloride concentrations in stormwater runoff. The public road system is already established in the village and much of the private land is already developed. Given the finding that only limited new development may occur, and that development will occur under either existing or proposed zoning, it is not expected that any significant new impacts will be introduced as a result of chloride in runoff.

No significant change in runoff conditions is expected as a result of the adoption of village-wide zoning. Site specific land use will be subject to subdivision, site plan and building permit review, at which time best management practices for stormwater management can be evaluated.

Narrow Bay Floodplain Protection and Hazard Mitigation Plan - As noted in the Narrow Bay Plan, the Mastic/Shirley peninsula is highly susceptible to flooding, due to its low elevation and location on the shores of Narrow Bay and Moriches Bay. The existing road system is established and evacuation routes are noted in signage within the village. Much of the development that

would occur under either existing or proposed zoning is "infill" development on scattered vacant lots. New development encouraged by zoning will occur in existing established areas with roads in place. In the case of a significant flood event, advance warnings are given at the county level and evacuation procedures implemented in advance of such an event. The proposed adoption of zoning is not expected to adversely impact flood conditions or hazard.

2.3.3 Proposed Mitigation

- Erosion control and construction phasing plans will be prepared for individual site developments during site plan review that will specify the methods to be utilized during construction to control transport of sediment and stormwater runoff during construction activities.
- Individual land use applications will be subject to site-specific SEQRA review under Part 617.
- New development will be required to retain all stormwater runoff on site. For those individual projects that involve one or more acres of disturbance, a SWPPP must be prepared pursuant to the requirements of the NYSDEC, and drainage systems must be designed to provide water quality and quantity requirements pursuant to the 2010 NYS Stormwater Management Design Manual.
- Identification and removal of any existing illicit discharges to stormwater conveyance systems during redevelopment will improve functioning of these systems, as well as reduce pollutant loads to surface water and groundwater.
- New development will require conformance to SCDHS regulations that control the use, storage and disposal of toxic and hazardous substances.
- New construction in the village would utilize water-conserving plumbing fixtures and mechanical systems that will conserve water resources. Additionally, incentive-based use of "green development" options such as green roofs, grey-water and rainwater recycling, roof gardens, etc. may be encouraged, reducing water demand.

2.4 Vegetation and Wildlife

2.4.1 Existing Conditions

Vegetation, Wildlife & Habitats

The Village of Mastic Beach is primarily comprised of suburban development; very few vacant and undisturbed lands remain. Lands that are vacant fall into one of the following three categories: freshwater wetlands, tidal wetlands, or vacant lands surrounded by development. NYS regulated freshwater and tidal wetlands are depicted on **Figure 2-5** while wetlands included in the National Wetlands Inventory are depicted in **Figure 2-6**.

Freshwater wetlands are important ecological communities. These habitats are generally more productive than upland habitats, and are typically high in both plant and animal diversity. Wetlands are also vital in controlling floodwaters and filtering pollutants, and are valuable as recreation areas and as refugia for rare species. As the intrinsic value of wetlands has become recognized, they have received increasing protection from Federal, State, and local regulations and are often prioritized for public acquisition and preservation. Wetland boundaries are generally defined by the presence of significant numbers of indicator plant species which are typical of flooded or waterlogged soils. This approach may be somewhat arbitrary and is open to individual interpretation, particularly in areas with shallow slopes and broad transition zones.

The NYSDEC has identified seven freshwater wetlands within or partially within the Village of Mastic Beach these areas comprise approximately 4,689.40 acres of wetland systems, 109.21 acres of which are located within the village (**Table 2-4**). These freshwater wetlands are all catalogued by the NYSDEC on the Moriches United States Geological Survey (USGS) 7.5-minute quadrangle and are illustrated in **Figure 2-5**. NYSDEC classifies freshwater wetlands into four categories, which are described in §664.5 of the NYSDEC regulations. Class I wetlands are considered the most pristine and therefore the most valuable, while Class IV wetlands lack characteristics which would give the wetland a high value. Only Class I and Class II wetlands are located within the village, the definitions of which, as provided by the NYSDEC, are listed below.

Table 2-4
NYSDEC FRESHWATER WETLANDS WITHIN THE VILLAGE

NYSDEC Freshwater Wetland ID	Wetland Class	Wetland Area (Acres)	Wetland Area within Village (Acres)
M-1	2	57.6	15.77
M-10	1	27.4	1.52
M-11	1	123.2	10.66
M-12	1	77.5	10.65
M-20	1	4,285.6	65.49
M-46	2	1.8	1.03
M-9	1	116.3	4.09
Totals		**4,689.4**	**109.21**

Class I wetlands:
A wetland shall be a Class I wetland if it has any of the following seven enumerated characteristics:
Ecological associations
(1) it is a classic kettlehole bog
Special features
(2) it is resident habitat of an endangered or threatened animal species
(3) it contains an endangered or threatened plant species
(4) it supports an animal species in abundance or diversity unusual for the state or for the major region of the state in which it is found
Hydrological and pollution control features
(5) it is tributary to a body of water which could subject a substantially developed area to significant damage from flooding or from additional flooding should the wetland be modified, filled, or drained
(6) it is adjacent or contiguous to a reservoir or other body of water that is used primarily for public water supply, or it is hydraulically connected to an aquifer which is used for public water supply or
Other
(7) it contains four or more of the enumerated Class II characteristics. The department may, however, determine that some of the characteristics are duplicative of each other, therefore do not indicate enhanced benefits, and so do not warrant Class I classification.

Class II wetlands:
A wetland shall be a Class II wetland if it has any of the following seventeen enumerated characteristics:
Covertype
(1) it is an emergent marsh in which purple loosestrife and/or reed (*Phragmites*) constitutes less than two-thirds of the covertype
Ecological association
(2) it contains two or more wetland structural groups
(3) it is contiguous to a tidal wetland
(4) it is associated with permanent open water outside the wetland
(5) it is adjacent or contiguous to streams classified C(t) or higher under article 15 of the environmental conservation law
Special features
(6) it is traditional migration habitat of an endangered or threatened animal species
(7) it is resident habitat of an animal species vulnerable in the state
(8) it contains a plant species vulnerable in the state
(9) it supports an animal species in abundance or diversity unusual for the county in which it is found
(10) it has demonstrable archaeological or paleontological significance as a wetland
(11) it contains, is part of, owes its existence to, or is ecologically associated with, an unusual geological feature which is an excellent representation of its type
Hydrological and pollution control features
(12) it is tributary to a body of water which could subject a lightly developed area, an area used for growing crops for harvest, or an area planned for development by a local planning authority, to significant damage from flooding or from additional flooding should the wetland be modified, filled, or drained
(13) it is hydraulically connected to an aquifer which has been identified by a government agency

as a potentially useful water supply
(14) it acts in a tertiary treatment capacity for a sewage disposal system
Distribution and location
(15) it is within an urbanized area
(16) it is one of the three largest wetlands within a city, town, or New York City borough or
(17) it is within a publicly owned recreation area.

As indicated in **Table 2-4** above, the majority of the freshwater wetlands within the village are Class I, indicating generally good habitat quality of these wetlands. While only two wetlands within the village are Class II, these wetlands still provide important habitat for local wildlife.

NYSDEC tidal wetlands located along the shoreline of the village include High Marsh (HM), Intertidal Marsh (IM), Shoals, Bars & Mudflats (SM), Dredge Spoil (DS) and Littoral Zone (LZ). The tidal wetlands within the village are located where the shoreline intersects and interfaces with tidal waters. These wetlands contain saline waters, which originate from the ocean-fed surface waters associated with Moriches Bay. These features are formed by coastal processes and, with the exception of formerly connected tidal wetlands, are subject to tidal influence. These areas are not only vital to the ecological systems to which they serve, but also function to control storm surges during flood and major storm events which may impact sensitive watershed areas. The NYSDEC maintains a series of tidal wetlands maps which document the location and type of tidal wetlands within New York State and includes a complete inventory for the area of the village. Tidal wetlands within the watershed are illustrated in **Figure 2-5**. The NYSDEC classifies tidal wetlands into fourteen distinct categories. Definitions for those categories present within the village are provided below.

SM - Coastal Shoals, Bars and Mudflats: The tidal wetland zone that at high tide is covered by saline or fresh tidal waters, at low tide is exposed or is covered by water to a maximum depth of approximately one foot, and is not vegetated.

LZ - Littoral Zone: The tidal wetland zone that includes all lands under tidal waters which are not included in any other category. There shall be no LZ under waters deeper than six feet at mean low water.

IM - Intertidal Marsh: The vegetated tidal wetland zone lying generally between average high and low tidal elevation in saline waters. The predominant vegetation in this zone is low marsh cord grass, *Spartina alterniflora*.

HM - High Marsh: The normal upper most tidal wetland zone usually dominated by salt meadow grass, *Spartina patens*; and spike grass, *Distichlis spicata*. This zone is periodically flooded by spring and storm tides and is often vegetated by low vigor, *Spartina alterniflora* and Seaside lavender, *Limonium carolinianum*. Upper limits of this zone often include black grass, *Juncus gerardi*; chairmaker's rush, *Scirpus sp.*; marsh elder, *Iva frutescens*; and groundsel bush, *Baccharis halimifolia*.

DS - Dredged Spoil All areas of fill material.

The majority of the land south of Forest Road East contains both freshwater and tidal wetlands.

Tidal wetlands present in this area include HM, SM, IM and DS areas. As the majority of tidal wetlands in this area are HM, IM and SM, the presence of these types of wetlands is indicative of the relatively natural state of the area. Similarly, the area south of Riviera Drive and Iris Road contain HM, IM and SM tidal wetlands, also indicating the relatively natural state of the area. HM wetlands are also located along the eastern shoreline of Pattersquash Creek and western shoreline of Lawrence Creek, which borders the village.

That National Wetlands Inventory categorizes wetlands regardless of their size and regulatory status. As illustrated on **Figure 2-6**, the majority of the wetlands with the village are characterized as "Estuarine" indicating that these wetlands are tidally influenced. Vegetation within these wetlands would consist of that adapted to tidal wetland environments.

Vacant vegetated areas within the village that are not comprised of wetlands are interspersed amongst highly developed areas. These areas may demonstrate remnants of the original habitat that was present, however, due to the significant disturbance surrounding these areas, the original vegetative habitat may be difficult to discern. It is anticipated that vegetation within these areas would consist of species that thrive in suburban habitats and invasive species that are opportunists in disturbed areas.

Wildlife within the majority of the village is anticipated to consist of species that are adapted to suburban habitats, such as raccoons, squirrels, deer, rabbits, robins, mocking birds, grackles and starlings. The exception to this assumption is areas of vegetated tidal and freshwater wetlands, where a greater diversity of wildlife may inhabit, including shore birds, turtles, bivalves, and reptiles adapted for living in wetland habitats.

New York Natural Heritage Program (NYNHP) data was reviewed to determine if any significant natural communities exist within the village. As depicted in **Figure 2-8**, no significant natural communities are located within the village; the nearest significant natural communities are located west of the village and are associated with the Carmans River.

Figure 2-8 also depicts NYS Significant Coastal Fish & Wildlife Habitats (SCF&WH) located in the vicinity of the village. The Moriches Bay SCF&WH is the only one located along the village shoreline. NYS prepares a Coastal Habitat Assessment analysis to determine as to whether or not a habitat complex should be included as a SCF&WH, a copy of which is provided in **Appendix D-1**. A summary of why this habitat was designated as significant by NYS is as follows:

- Ecosystem Rarity: Moriches Bay is one of the largest, protected, shallow, coastal bays in New York State.
- Species Vulnerability: Roseate tern (Endangered), least tern (Threatened), common tern (Threatened), osprey (Special Concern), and black skimmer (Special Concern) nesting and feeding areas exist within Moriches Bay.

- Human Use: Recreational fishing, shellfishing, and waterfowl hunting in the area are significant to residents from throughout Long Island.
- Population Level: Concentrations of wintering waterfowl are of statewide significance.
- Replacaebility: The habitat in Moriches Bay is irreplaceable.

The NYNHP was also contacted to determine the presence of any rare, threatened or endangered species located within the village (**Appendix D-2**). The NYNHP identified one occurrence of saltmarsh aster (*Symphyotrichum subulaturm var. subulatum*), a threatened plant, along Johns Neck Creek near Forest Road West. The NYNHP notes that the site the species is found in is heavily disturbed and infested with invasive species.

Regulatory Conditions

As previously indicated, both freshwater and tidal wetlands exist within the boundaries of the village. Future improvements associated with the adoption of Village Zoning Code may fall under the jurisdiction of the State (Articles 24, 25 and 34 as described below), and Federal wetlands and coastal regulations. New York State enacted Article 34 of the Environmental Conservation Law in order to reduce coastal erosion as a result of both natural and anthropogenic activities. Municipalities have the option to implement and administer a Coastal Erosion Management Program under this law. The village has not yet adopted the provisions of Article 34 and as a result these provisions would be subject to State jurisdiction. Any actions occurring within the Coastal Erosion Hazard Area would require an Article 34 permit from the State.

The NYSDEC also regulates activities within freshwater wetlands through Article 24 and tidal wetland areas through Article 25. NYSDEC freshwater wetland jurisdiction extends 100 feet from the vegetated wetland boundary, while tidal wetland jurisdiction extends 300 feet from the wetlands boundary unless the intervening area is less than elevation 10 or there is a road or other barrier (**NYSDEC 1992**).

Both the Army Corp of Engineers (ACOE) and the NYSDOS regulate coastal areas. "Section 10 of the Rivers and Harbors Act of 1899 requires approval prior to the accomplishment of any work in or over navigable waters of the United States, or which affects the course, location, condition or capacity of such waters (**ACOE**)." Permits obtained from the ACOE include either Nationwide Permits, which provide a permit for common activities, or an individual permit, which is for activities which are not listed under a Nationwide Permit.

In conjunction with the ACOE review, the NYSDOS reviews the proposed project to determine if the project is compatible with the NYSDOS' Coastal Management Program (CMP). "The federal Coastal Zone Management Act (CZMA) requires that each Federal agency activity within or outside the coastal zone that affects any land or water use or natural resource of the coastal zone shall be carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of approved State management programs (**NYSDOS**)." Concurrence regarding the consistency of any regulated projects with Coastal Management Policies would need to be obtained from the NYSDOS.

2.4.2 Anticipated Impacts

Vegetation, Wildlife & Habitats

It is important to note that adoption of the Village Zoning Code will not result in any immediate impacts to vegetation and wildlife, however, development resulting from changes in zoning could potentially impact vegetation and wildlife.

Ultimately, impacts to wetlands will need to be evaluated on a case by case basis as development is proposed within the village. However, in general, impacts associated with the proposed zoning code on wetlands are anticipated to be minimal as current SCDHS, State and Federal regulations prohibit development within vegetated wetlands. As a result, changing the zoning of parcels that are primarily wetlands with little to no available upland area for development would not result in development of wetland areas.

It is noted that vacant, non-wetland parcels may be developed under the proposed village zoning code; however, these parcels may also be developed under current zoning code. While intensity of use of specific parcels may change, development of these parcels would require some amount of natural vegetation in either scenario. As under both scenarios, some clearing of natural vegetation would occur with development of a specific parcel, impacts from the change of zone on this parcels is anticipated to be the same in both scenarios.

As with vegetation, impacts on local wildlife would be similar under both development under existing zoning and development under the proposed zoning. Clearing of these parcels would occur under both scenarios, resulting in the temporary or permanent displacement of wildlife in that area. As indicated in **Section 2.4.1**, as the village is mostly developed, wildlife anticipated to utilize the area would be adapted to suburban environments. As such, wildlife utilizing the few vacant wooded areas within the village would be anticipated to be able to adapt to the suburban environment. As a result, impacts to wildlife as a result of the proposed change of zone are anticipated to be minimal.

As the developable vacant parcels are located in areas surrounded by development, these areas are not expected to act as refuges for rare, threatened or endangered species. As the NYNHP did not identify any rare, threatened or endangered species in these areas, impacts associated with rare, threatened or endangered species on these parcels is not anticipated. While the NYNHP did identify one threatened plant in the vicinity of Johns Neck Creek, this plant thrives in wetlands habitats which, as previously indicated, cannot be developed under existing or proposed zoning. As a result, impacts to rare, threatened or endangered species are not anticipated under the proposed action.

Regulatory Conditions

Section 2.4.1 details the applicable State and Federal regulations that would impact development abilities within or adjacent to wetlands. The village is currently not proposing wetland regulation within the proposed zoning code. As a result, all State and Federal wetland regulations would still apply under the proposed code, and development within regulated wetlands would not be permitted. Development of any parcel within the State regulated adjacent

area for freshwater or tidal wetlands would require a permit from the NYSDEC. Improvements below spring high water or within non-state regulated wetland areas would also require a permit from the ACOE and NYSDOS. As the regulatory conditions of development of parcels within the village under the proposed zoning code will not change, impacts associated with regulatory permits are not anticipated.

2.4.3 Proposed Mitigation

- The village will review development associated with vacant vegetated parcels on a case by case basis to determine impacts to vegetation and wildlife.
- New development will be required to adhere to Resolution 614-2007 enacted by the Suffolk County Legislature which bans certain invasive species within Suffolk County.
- Development within the State regulated wetland adjacent area will require permits from the NYSDEC.
- Development within non-State regulated wetlands or below SHW will require permits from the NYSDEC, ACOE and NYSDOS.
- Individual land use applications will be subject to site-specific SEQRA review under Part 617.

SECTION 3.0

HUMAN ENVIRONMENTAL RESOURCES

3.0 HUMAN ENVIRONMENTAL RESOURCES

As noted in **Section 2.0**, impacts associated with adoption of a new zoning code primarily involve public policy related changes in terms of directing new development and redevelopment in conformance with the goals set by the village through zoning. **Section 1.4** summarizes the potential uses and yields that could occur under existing zoning as compared to proposed zoning. It is the change in development potential that is appropriate for analysis in a DGEIS.

This section includes a baseline of information on the human resources of the Village of Mastic Beach, from a village-wide perspective. Resource categories include: Land Use, Zoning and Plans, Community Character, Community Services, Demography and Cultural Resources. Understanding these resources allows for an assessment of the potential impact of changes that could occur when comparing the difference between existing and proposed development as a function of the adoption of the new zoning code.

The existing character of the village is well established through the pattern of development that has evolved as a result of small lot subdivision and conversion of the peninsula from recreational to year-round use. The applicable human resources will be evaluated with respect to changes that may be affected as a result of the change in development potential resulting from the adoption of new zoning for the Village of Mastic Beach.

3.1 Land Use, Zoning and Plans

3.1.1 Existing Conditions

Land Use

The Village of Mastic Beach encompasses approximately 3.79 square miles (2,423 acres) and includes a mix of land uses characteristic of both a rural and a suburban community. As demonstrated by **Table 3-1**, the village's land uses are mainly comprised of residential uses (63%), with lesser amounts of land as vacant (19%), and surface waters (14%). Combined, these three categories comprise 96% of the land area of the Village, leaving only 4% for the remaining eight land use types.

Figure 3-1 depicts the pattern of land uses that currently exists in the village. As can be seen, the large majority of the village is used for residential purposes; this land use type is found throughout Mastic Beach, with the exception of much of the shoreline areas. There are areas of commercial use, most of which are distributed along Neighborhood Road and Commack Road/Mastic Beach Road. Several marinas and parks are located on shoreline areas in the eastern and western portions of the Village. A number of institutional sites are found in the central portion of the village, and include the firehouse and Episcopal Church. Finally, a small amount of industrial land is located in the northern part of the village, on Mastic Beach Road.

Table 3-1
EXISTING LAND USE DISTRIBUTION

Land Use Type	Village	
	Acres	%
Commercial	29.84	1.23
Industrial	6.56	0.27
Institutional	33.45	1.38
Marina	8.51	0.35
Parks & Recreation	16.81	0.69
Residential	1,515.45	62.54
Surface Water	347.49	14.34
Transportation	4.90	0.20
Utility	3.68	0.15
Vacant	449.74	18.56
Wetlands/Open Space	6.95	0.29
TOTAL	**2,423.39**	**100.00%**

Zoning

The Village of Mastic Beach is currently comprised of the following zoning districts:

- A-1 Residential (40,000 SF minimum lot size)
- A-2 Residential (80,000 SF minimum lot size)
- A-5 Residential (200,000 SF minimum lot size)
- A-10 Residential (40,000 SF minimum lot size)
- J Neighborhood Business (15,000 SF minimum lot size)
- J-2 General Business (4,000 SF minimum lot size)
- J-5 Gasoline Filling Station (20,000 SF minimum lot size)
- J-6 Highway Limited Business District (no minimum lot size)
- PRC Planned Retirement Community (minimum 10 acres)

As noted above, the village encompasses approximately 3.79 square miles (2,423 acres), of which 2,069.5 acres are divided into various zoning districts (see **Figure 1-3**). As demonstrated by **Table 3-2**, the village's zoning districts provide mainly for the residential uses that dominate the village. Specifically, the four (4) residential districts encompass 2,002.88 acres (96.8% of the village; omitting right-of-way land and water), with business zones occupying 54.00 acres (2.6% of the village; also omitting right-of-way land and water).

Figure 1-3 depicts the pattern of the village's existing zoning districts. This map confirms that the village is zoned overwhelmingly for residential use, and that the limited areas of business-related zoning are distributed mostly along Neighborhood Road and Commack Road/Mastic Beach Road, in the central portion of the village. A few limited areas of business zoning are found along the shorelines in the eastern and western parts of the village, for the marinas that

exist in these locations. It is noted that the institutional sites in the central portion of the village (e.g., the firehouse and Episcopal Church) are zoned residential. Finally, a small amount of industrial zoning is located in the northern part of the village, on Mastic Beach Road.

Table 3-2
EXISTING ZONING DISTRIBUTION

District	Village	
	Acres	%
A-1 Residential	1,731.43	83.7%
A-2 Residential	269.15	13.0%
A-5 Residential	2.12	0.1%
A-10 Residential	0.18	0.0%
J Neighborhood Business	13.19	0.6%
J-2 General Business	39.62	1.9%
J-5 Gasoline Filling Station	0.24	0.0%
J-6 Highway Limited Business	0.95	0.0%
PRC Planned Retirement Community	12.62	0.6%
Sub-Total	2,069.50	100%
ROW	6.29	--
Water	347.61	--
TOTAL	**2,423.4**	

Note: Split zoned parcels grouped with majority of parcel zoning

Plans

There are presently no comprehensive land use or master planning documents for the Village of Mastic Beach. At the present time, the Village Board considers the Village Zoning Code to represent the village's planning document. The legislative intent/purpose of the proposed zoning code offers insight into the important planning goals of the village. These goals are reiterated below:

A. To guide and regulate the orderly growth, development and redevelopment of the Village of Mastic Beach in accordance with the more general long-range objectives which are deemed beneficial to the interests and welfare of the people.
B. To protect the established character and the social and economic well-being of both private and public property.
C. To promote, in the public interest, the utilization of land for the purposes for which it is most appropriate.
D. To promote, in the public interest, the preservation of prime natural areas.
E. To secure the maximum recharge of the Village of Mastic Beach's fresh groundwater reservoir through protection of the natural environment and watershed areas.
F. To protect the healthful biological and chemical balance in the adjacent bays, estuaries and all tributary watercourses and drainage lines.
G. To secure safety from fire, panic, flood, storm and other dangers; to provide adequate light, air and convenience of access; and to prevent environmental pollution.

H. To prevent overcrowding of land or buildings and to avoid undue concentration of population.
I. To conserve the value of buildings and to enhance the value of land throughout the Village of Mastic Beach.
J. To provide housing sites for residents of the community compatible with their economic means.
K. To lessen and, where possible, to prevent traffic congestion on public streets and highways.
L. To eliminate nonconforming uses gradually.
M. To conserve and reasonably to protect the natural scenic beauty and cultural and historic resources of the Village of Mastic Beach and its environs.

3.1.2 Anticipated Impacts

Land Use

Adoption of the proposed action is a regulatory action and would not result in any physical changes to the village; therefore, no impact on land uses would occur.

Table 1-6 indicates that development under the proposed zoning would generate 4 residences, 38,775 SF of commercial space and 3,526 SF of industrial space more than would occur from development under the existing zoning. The impacts associated with this amount of growth would have a minor effect on the acreages and the geographic distribution of land use types in the village, particularly given that residential use is the dominant use category in the village and this will only change by a potential for 4 additional residences.

The existing pattern of land use in the village would remain largely unchanged as a result of the proposed action. The major anticipated land use changes would involve development of currently-vacant sites; these sites would eventually be developed regardless of the proposed adoption of a new zoning code. The large majority of the village is currently used for residential purposes and would only be slightly increased by the proposed zoning. The limited areas of commercial use, most of which are distributed along Neighborhood Road and Commack Road/Mastic Beach Road would be increased in these areas, but this use type would not be expanded into areas where it is not already represented. Proposed zoning would also accommodate a small amount of new industrial development.

Overall, the proposed zoning is intended to reflect the existing pattern of land use in the village, and expand some areas for commercial growth and waterfront development potential. The existing residential districts and commercial areas will remain. Waterfront development potential will be limited due to natural resource constraints as noted in **Section 1.4**. No specific actions are proposed, therefore, any change in land use will occur incrementally over a long period of time as in conformance with the new zoning. Any site specific development would be subject to subdivision, site plan and/or building permit review at the time development is proposed. During that review, conformance with various SCDHS, NYSDEC and related land use requirements would be determined. Consequently, no significant adverse environmental impacts have been identified with respect to land use as a result of the proposed project.

Zoning

Adoption of the proposed action is a regulatory action and would not result in any physical changes to the village; therefore, no physical impact on zoning would occur. However, the proposed action will replace the existing village zoning categories with a new set of categories, as follows:

- R-1 Residence District (7,500 SF minimum lot size)
- R-2 Residence District (80,000 SF minimum lot size)
- RH Retirement Housing District (minimum 8 acres)
- R/B Residence/Business District (10,000 SF minimum lot size)
- B-1 Business District (10,000 SF minimum lot size)
- B-2 Business District (20,000 SF minimum lot size)
- I Industrial District (20,000 SF minimum lot size)
- WD Waterfront District (10,000 SF minimum lot size)
- X Business District (Floating District - 20,000 SF minimum lot size)

This will have the effect of having existing land use better conform with zoning than the current zoning. The proposed zoning districts would also establish a framework around which future village growth and development will occur, in a manner that is more consistent with the goals of the village as outlined in the legislative intent/purpose of the new code.

The proposed action will change the zoning classifications of all of the zoned acreage of the village which, based on **Tables 1-3 and 1-4**, encompasses 7,579 properties and 2,423 acres. As demonstrated by **Table 3-3**, the village's zoning districts will continue to provide mainly for the residential uses, with secondary amounts of commercial uses.

Table 3-3
PROPOSED ZONING DISTRIBUTION

District	Village	
	Acres	%
R-1 Residence	1,647.85	79.4%
R-2 Residence	262.78	12.7%
RH Retirement Housing	14.86	0.7%
R/B Residence/Business	92.26	4.4%
B-1 Business	38.64	1.9%
B-2 Business	6.00	0.3%
I Industrial	0.40	0.0%
WD Waterfront	12.95	0.6%
X Business	--	--
TOTAL	**2,075.74**	**100%**

Note: Does not include ROW land or water.

As for the proposed zoning, the impact on zoning from a difference of 4 residences, 38,775 SF of commercial space and 3,526 SF of industrial space on the overall pattern of zoning on 2,423 acres (or 2,075.74 acres of land subject to zoning) of the village would not be significant. The zoning would more closely reflect existing land use, and would provide potential for some additional commercial and waterfront district use. Future land use in conformance with zoning would be subject to subdivision, site plan and/or building permit review and would therefore be reviewed at the time that development is proposed.

At present, the Town zoning is not reflective of the existing pattern of development. A majority of land in the village is zoned residential under the A-1 district, yet most lots are well under 40,000 SF. The proposed zoning will more closely reflect the lot sizes present within the village. As a result, the proposed zoning will reduce the number of variances needed in connection with land use approvals. This is considered a beneficial impact for village residents with no loss in protection of environmental resources.

No specific actions are proposed, therefore, any change in land use will occur incrementally over a long period of time as land use used as provided for under the new zoning. Any site specific development would be subject to subdivision, site plan and/or building permit review at the time development is proposed. During that review, conformance with various SCDHS, NYSDEC and related land use requirements would be determined. Consequently, no significant adverse environmental impacts have been identified with respect to land use as a result of the proposed project.

Plans

As the Village of Mastic Beach does not currently have a land use or master plan in place. The village was formed in 2010, and planning efforts have been focused on articulating the goals of the village in the legislative purpose of the new zoning and establishing zoning that reflects these goals. The proposed zoning more closely reflects the existing land use pattern in the village, and provides opportunities for business and waterfront development in areas as intended by the new code. There are no adverse impacts with respect to land use plans as the village is creating the plan that will provide a framework for land use, zoning, development and redevelopment in the village.

3.1.3 Proposed Mitigation

- The proposed action will enable the community to realize their desire to enact and implement their own land use decisions, to remedy the disconnect between the village's zoning districts and the actual pattern of land uses in the village, to protect and preserve their community identity, and to obtain the authority to guide their future development.
- Future site-specific actions must comply with agency regulations and SEQRA (6 NYCRR Part 617).

3.2 Community Character

3.2.1 Existing Conditions

Visual Character

The existing visual character of the village is described herein based on current development conditions as documented in a photographic portfolio (**Appendix B**). The portfolio indicates that the visual character of the village is diverse and is comprised of a number of factors, including: the distribution of the land uses that have shaped the community; the condition and usage of transportation corridors; and the presence and condition of natural areas.

As described in **Section 3.1.1**, most of the village is used for residential purposes; this land use type is found throughout the village with the noted exception of much of the shoreline areas. There are areas of commercial use, most of which are distributed along Neighborhood Road and Commack Road/Mastic Beach Road. Several marinas and parks are located on shoreline areas in the eastern and western portions of the village. A number of institutional sites are found in the central portion of the village, and include the firehouse and Episcopal Church. Finally, a small amount of industrial land is located in the northern part of the village, on Mastic Beach Road.

A review of the photographs shows that the village can be described as rural/suburban in character, based on the low-density residential uses that dominate it, with commercial corridors along Neighborhood Road and Commack Road/Mastic Beach Road. Substantial amounts of wooded vacant land are interspersed throughout the residential areas, lending a distinctive "small town" aesthetic to the village. The presence of significant amounts of shoreline, both developed and undeveloped/open space, contribute to the village's rural character noted above, to create an attractive and desirable sense of place.

Noise

General Noise Information - Noise can have various effects on human beings ranging from annoyance to hearing loss. A noise problem is said to exist when noise interferes with human activities[1]. Sound waves are generated in varying frequencies, which are described in hertz ("Hz"), a measure of cycles per second. The human ear is sensitive to frequencies between 20 Hz to 20,000 Hz and is most sensitive to frequencies between 200 and 10,000 Hz with the lower frequencies heard as lower or bass tones and upper frequencies as high tones. The frequencies are divided into octave bands on a logarithmic basis. The logarithmic center frequency of each octave band is such that each successive center frequency is twice the preceding center frequency. Common center frequencies used in octave band analysis are 63, 125 250, 500, 1,000, 4,000 and 8,000 (Hz). The middle range (e.g., 1,000 Hz) are heard best by the human ear, while the lower octaves (31.5 or 63 Hz) are perceived less and the upper octaves (4,000 or 8,000 Hz) are perceived a little better, even at high power. When describing sound in terms of human perception, the levels are weighted according to the human sensitivity to various frequency levels; the result of which is known as the "A-weighted" scale.

[1] Rau, John G., Wooten, David C., 1980, Environmental Impact Analysis Handbook, McGraw-Hill, Inc.

Various noise scales have been developed to describe the response of an average human ear to sound. The most common unit utilized to characterize noise levels is the A-weighted decibel ("dBA"), which weighs the various components of noise according to the response of the human ear. Because the human ear perceives the middle range of frequencies better than the high or low frequencies, the dBA scale assigns the middle range a much larger "loudness" value than higher and lower frequencies.

Physical measurements of noise may be conducted in dBA using a sound meter. The meter collects sound power levels at the varying frequency values, which are automatically interpreted as a function of human hearing frequency response (according to the A-weighted decibel scale). The A-weighted scale thus provides a measure of noise that is meaningful for assessing ambient noise environments and potential noise impacts as heard by human beings. A change of 1.0 dBA in not discernible. On average, a change of 3 dBA is required for the average person to detect a difference in the level of noise, and a change in the range of 5-6 dBA is noticeable and is considered to be an impact as referenced in **Table 3-4**.

Table 3-4
PERCEIVED CHANGES IN NOISE LEVEL

Change in dBA	Human Perception of Sound
2-3	Barely perceptible, threshold of detection
5-6	Readily noticeable
10	Doubling or halving of the loudness of sound
20	Dramatic change
40	Difference between a faintly audible sound and very loud sound

Source: USDOT, 1980[2]

The decibel scale is logarithmic; therefore, sound levels vary widely with the source and with the listener's distance from the source. Sound level decreases as a result of dispersion and is predicted by the "inverse square law", which predicts a reduction of 4.5 dBA for each doubling of distance from a line source (such as a roadway) and 6 dBA from a point source. This effect is due to natural dispersion only and is not a function of the presence of mitigating measures (e.g., barriers) or other objects[3]. Because noise fluctuates, it is common to average noise levels over a period of time to describe the "equivalent continuous noise level" or L_{eq}. The typical noise level associated with an urban area is typically 60 to 70 dBA, whereas a busy city street can be upwards of 90 dBA. **Table 3-5** provides typical noise levels as compared to a base reference of 60 dBA.

[2] US Department of Transportation, 1980, Highway Noise Fundamentals - Noise Fundamentals Training Document, Federal Highway Administration, Washington, D.C.

[3] US Department of Transportation, 1980-1, Highway Noise Fundamentals. Federal Highway Administration, National Highway Institute, Washington, D.C.

Table 3-5
COMMON NOISE LEVELS AND REACTIONS

Sound Source	Noise Level (dBA)	Apparent Loudness	Typical Human Reaction
Military Jet Air raid siren	130	128 times as loud	Limit of amplified speech
Amplified rock music	110	32 times as loud	Maximum vocal effort
Jet takeoff at 500 meters Train horn at 30 meters	100	16 times as loud	
Freight train at 15 meters	95		
Heavy truck at 15 meters Busy city street Loud shout	90	8 times as loud	Very annoying Hearing damage (after 8 hours)
Busy traffic intersection	80	4 times as loud	Annoying
Highway traffic at 15 meters Train horn at 500 meters Noisy restaurant	70	2 times as loud	Telephone use difficult
Predominantly industrial areas Light car traffic at 15 meters City or commercial areas Residential areas close to industry Noisy office	60	Base reference	Intrusive
Quiet office Suburban areas with medium-density transportation	50	1/2 as loud	Speech interference
Public library	40	1/4 as loud	Quiet
Soft whisper at 5 meters	30	1/8 as loud	Very quiet
	10	1/32 as loud	Just audible
Threshold of hearing	0	1/64 as loud	

Note: The minimum difference in noise level noticeable to the human listener is 3 dBA. A 10 dBA increase in level appears to double the loudness, while a 10 dBA decrease halves the apparent loudness.

Sources: NYSDOT, 1980[4] and White, 1975[5]

(1) Between the hours of 8 PM and 7 AM the following day on weekends or at any time on Saturdays or legal holidays, such that the sounds therefrom create unreasonable noise across a residential real property boundary.

(2) At any time such that the airborne sound exceeds the standards a set forth in Section 280-3 of this chapter."

[4] NYSDOT, Environmental Analysis Bureau, August 1998 Environmental Procedures Manual, Chapter 3.1, Noise Analysis Procedures, Project Environmental Guidelines.

[5] White, Frederick A., 1975, Our Acoustic Environment. John Wiley & Sons, Inc.

Existing Noise Environment - The existing noise environment in the Village of Mastic Beach is typical of a suburbanized, rural area. In this type of environment, the majority of background noises are generated by vehicle traffic, particularly by trucks traversing busier roadways. There is no LIRR track in the village, so train noises do not occur, or are only somewhat audible within the village. There are no significant industrial uses in the village to generate excessive environmental noise.

Village Noise Code - The village's noise ordinance and standards are provided in Chapter 280 of the Village Code. The village defines noise pollution as *"Any airborne sounds of such level and duration which exceeds the permissible limits set forth in this chapter."* The Code includes specific standards for noise generated at the lot line of the generator in residential areas, as follows: between 7 AM and 7 PM, noise in excess of 65 dBA, and 50 dBA between 7 PM and 7 AM. For business or industrial areas, between 7 AM and 7 PM, noise may not exceed 70 dBA, while noise may not exceed 55 dBA between 7 PM and 7 AM. For construction-related circumstances, *"No person shall operate or permit to be operated any tools or equipment used in construction, drilling or demolition work:"*

3.2.2 Anticipated Impacts

Visual Character

Adoption of the proposed action is a regulatory action and would not result in any physical changes to the village; therefore, no impact to the visual character of the village would occur.

Table 1-6 indicates that the proposed zoning would allow for 4 residences, 38,775 SF of commercial space and 3,526 SF of industrial space more than would result from the existing zoning. This difference in yield would not be sufficient to cause a significant adverse impact on the visual character of the village, as such development would occur as infill development or would be located on sites where the use would complement the land use pattern and be in proximity to other similar or complementary uses. This would suggest that this development would conform to the intensity and type of development in the vicinity, which would tend to lessen the potential for significant and/or adverse aesthetic impacts. The proposed Waterfront District would involve placement of uses in areas that are relatively devoid of existing uses other than intermittent residential and recreation related structures. If development were to occur in open wetland areas with high visibility, potential adverse change to the visual environmental may result. However, it is noted that these areas also correspond with designated wetlands and so may not be able to accommodate new development based on these constraints.

Noise

Adoption of the proposed action is a regulatory action and would not result in any physical changes to the village; therefore, no impact to the noise environment would occur.

The difference in impacts with respect to residential noise associated would be related to the amount of traffic noise generated by 4 residences. This type of use does not, in and of itself, generate a significant amount of noise. In addition, the size of this difference in yield, 4 residences, is small and is not expected to change the pattern of land uses in the village such that noise-generation patterns will be significantly changed, so the character of the noise environment is not expected to change significantly.

For non-industrial uses, it is expected that truck traffic and HVAC systems are the primary sources of noise to consider. As noted above, it is not expected that significant changes in the pattern of land uses will result from the proposed action, so that existing non-residential areas would receive the bulk of any new non-residential uses. This means that the pattern of noise generated in such areas of the village would not be impacted by the small potential increase of 38,775 SF of commercial space and 3,526 SF of industrial space as compared with existing zoning. With respect to HVAC noise, such systems will generally be located on building roofs, and distant from street-level receptors. In addition, new facilities would use new HVAC systems that are generally more quiet in comparison to individual units and older systems (i.e., a new centralized HVAC system for a multiuse building is significantly quieter than individual window units or an old HVAC system). Finally, any and all new non-residential development will be required to conform to the Village Noise Code.

3.2.3 Proposed Mitigation

- Site-specific projects will be subject to subdivision, site plan and/or building permit review at which time visual character and potential noise related impacts can be considered.

- Site-specific projects will be subject to SEQRA review at the time a use is proposed. Visual character and potential noise impacts and mitigation can be considered in this context.

- Existing and proposed uses will be subject to the village noise ordinance under Chapter 280 of the village code.

3.3 Community Services

3.3.1 Existing Conditions

Community services are publicly funded entities that provide a governmental function, activity or service for public benefit. Provision of adequate public facilities and services plays an important role in maintaining a cohesive community. The various community facilities and services relevant to the village include recreation, schools, police, fire and emergency services, sewage treatment and public water supply services.

Taxes
The majority of the village's revenues, including revenues generated for use by community service providers, are levied through property tax generation, which is based upon a rate per $100 of assessed valuation for a given parcel.

Table 3-6 presents the total taxes anticipated for development of the soft sites under their existing zonings. As can be seen, the largest portion of the taxes generated would be allocated to the William Floyd School District ($586,423), with lesser amounts going to Suffolk County ($83,302), the Town of Brookhaven ($14,253), and other area taxes and special districts ($69,758).

Schools
The Village of Mastic Beach is within the William Floyd School District (see **Figure 3-4**).

Police Protection
The Suffolk County Police Department, 6th Precinct serves the Village of Mastic Beach. Sectors 505, 512 and 519 share patrol responsibilities for the area encompassed by the village (see **Figure 3-5**).

Fire Protection
As shown in **Figure 3-5**, the majority of the village is within the Mastic Beach Fire District, and is therefore served by the Mastic Beach Fire Department. However, portions of the village's northern area are within the Mastic Fire District, and so are served by the Mastic Fire Department.

Sewer
As shown in **Figure 3-6**, there is only one sewage treatment plant (STP) in the village; it is privately-owned and serves only the PRC located on Mastic Beach Road, opposite Peeker Avenue.

Water
The Village of Mastic Beach does not have its own water supply system or service; all public water in the village is provided by the SCWA. There are no public supply wellfields in the village.

Recreation
As identified in **Figure 3-7**, there are two village parks in Mastic Beach, there is one NYS wetland , and there is one, large federal open space (the Fire Island National Seashore) adjacent to the village.

Table 3-6
TAX GENERATION AND ALLOCATION
Existing Zoning

Taxing Jurisdiction	Existing Zoning		
	Current Tax Rate (per $100 AV*)	Projected Tax Revenue[6]	Percent of Total
Total: School Tax	**291.793**	**$642,600**	**79.3%**
William Floyd UFSD	266.284	$586,423	72.4%
William Floyd UFSD - Library District	25.509	$56,177	6.9%
Total: County Tax	**37.826**	**$83,302**	**10.3%**
Suffolk County	2.859	$6,296	0.8%
Suffolk County Police	34.967	$77,006	9.5%
Total: Town Tax	**6.472**	**$14,253**	**1.8%**
Town General - Town Wide Fund	3.688	$8,122	1.0%
Highway - Town Wide Fund	2.784	$6,131	0.8%
Total: Other Tax	**31.676**	**$69,758**	**8.6%**
New York State MTA Tax	0.152	$335	0.0%
$100M Bond Act of 2004	1.593	$3,508	0.4%
Mastic Beach Fire District	10.103	$22,249	2.7%
Brookhaven Lighting District	1.273	$2,803	0.3%
Mastic Beach Ambulance District	11.105	$24,456	3.0%
Real Property Tax Law	7.001	$15,418	1.9%
Out of County Tuition	0.449	$989	0.1%
TOTAL: ALL TAXING JURISDICTIONS	**367.767**	**$809,913**	**100.0%**

3.3.2 Anticipated Impacts

Adoption of the proposed action is a regulatory action and would not result in any physical changes to the village; therefore, no impact to the village's community services would occur. If development occurs, it will be incremental, over a period of time and would be consistent with zoning. In large part, any new development will involve infill parcels in areas that have existing infrastructure and access to community services. The zoning itself will not create a demand for community services; however, as land use occurs in conformance with zoning, taxes will be generated and demand for certain services will increase. The existing zoning will also result in development that will increase taxes and demand for community services. The difference in revenue generation and demand is restricted to the change caused by the new zoning which has been quantified and is discussed below.

[6] Based upon the median sale price of homes sold within the Village of Mastic Beach in the past 12 months ($103,000), and the market valuation of 175,817 SF of commercial space at a construction cost of $123 per SF. The Assessed valuation utilizes the current equalization rate of 0.91 percent.

Taxes

Table 1-6 indicates that the proposed zoning would allow for 4 residences, 38,775 SF of commercial space and 3,526 SF of industrial space more than would result from the existing zoning. This difference in yield would not be sufficient in size or character to cause a significant adverse impact on the tax structure of the village, and in fact is expected to increase revenue as a function of increased commercial use potential (see **Table 3-7**).

Table 3-7
TAX GENERATION AND ALLOCATION
Proposed Zoning

Taxing Jurisdiction	Proposed Zoning		
	Current Tax Rate (per $100 AV*)	Projected Tax Revenue[7]	Percent of Total
Total: School Tax	**291.793**	**$790,011**	**79.3%**
William Floyd UFSD	266.284	$720,947	72.4%
William Floyd UFSD - Library District	25.509	$69,064	6.9%
Total: County Tax	**37.826**	**$102,411**	**10.3%**
Suffolk County	2.859	$7,741	0.8%
Suffolk County Police	34.967	$94,671	9.5%
Total: Town Tax	**6.472**	**$17,523**	**1.8%**
Town General - Town Wide Fund	3.688	$9,985	1.0%
Highway - Town Wide Fund	2.784	$7,538	0.8%
Total: Other Tax	**31.676**	**$85,761**	**8.6%**
New York State MTA Tax	0.152	$412	0.0%
$100M Bond Act of 2004	1.593	$4,313	0.4%
Mastic Beach Fire District	10.103	$27,353	2.7%
Brookhaven Lighting District	1.273	$3,447	0.3%
Mastic Beach Ambulance District	11.105	$30,066	3.0%
Real Property Tax Law	7.001	$18,955	1.9%
Out of County Tuition	0.449	$1,216	0.1%
TOTAL: ALL TAXING JURISDICTIONS	**367.767**	**$995,708**	**100.0%**

Schools

The proposed zoning would allow for 4 residences more than would result from the existing zoning. The difference in the number of school-age children from these 4 units would not cause a significant adverse impact on either enrollments or school expenditures.

[7] Based upon the median sale price of homes sold within the Village of Mastic Beach in the past 12 months ($103,000), and the market valuation of 214,592 SF of commercial space at a construction cost of $123 per SF, and the market valuation of 3,526 SF of industrial space at a construction cost of $105 per SF. The Assessed valuation utilizes the current equalization rate of 0.91 percent.

Police Protection

The difference in the yields of the two development scenarios, 4 residences, 38,775 SF of commercial space and 3,526 SF of industrial space, would not be sufficient in size or character to cause a significant adverse impact on the SCPD's existing level of patrol responsibilities. There will, nonetheless, be an increase in taxes generated on the soft sites from either development scenario that would tend to offset the added costs of service provision.

The SCPD will have the opportunity to provide input on proposed development plans during the site plan review of individual projects.

Fire Protection

Table 1-6 indicates that the proposed zoning would allow for 4 residences, 38,775 SF of commercial space and 3,526 SF of industrial space more than would result from the existing zoning. This difference in yield is not expected to be sufficient in size or character as to cause a significant adverse impact on the Mastic Beach or Mastic Fire Departments, as this development difference is only an incremental increase in developed areas within each fire district, and fire protective services have been established for these areas. There will, nonetheless, be an increase in taxes generated on the soft sites from either development scenario that would be sufficient to offset at least a portion of any increased department costs of services.

Sewer

As there are no publicly-accessible STPs in the village, there would be no impacts to such services. It is expected that any development in the village, under existing or proposed zoning, will utilize conventional on-site sanitary systems in conformance with SCDHS requirements.

Notwithstanding the above, each individual application for development within the village will still be subject to normal subdivision, site plan and building permit approval requirements, regardless of zoning and existing entitlements at the time of those applications. This land use review process will involve review by SCDHS and conformance with Article 6 of the SCSC for best management of water resources related to density of development and sanitary discharge. The site land use review process and associated site specific environmental review will ensure that development does not further compromise the village's infrastructure, while providing a clear path toward responsible economic development that will benefit the entire community.

Water

The difference in yields associated with the existing and proposed zonings (4 residences, 38,775 SF of commercial spaces and 3,526 SF of industrial space) is not expected to require a volume of water that would adversely impact the SCWA or its ability to continue to provide adequate service to its customers.

Recreation

The difference of 4 residences between the yields of the existing and proposed zonings would not be expected to produce a significant difference in the number of village residents that would potentially use public recreational spaces. As a result, there would not be a substantial difference in the anticipated levels of usage of these public facilities, so that no significant impact would be anticipated for the proposed action.

3.3.3 Proposed Mitigation

- Significant increases in tax revenues and allocations to each of the pertinent taxing jurisdictions, including the village, are expected from development associated with the proposed zoning. The revenues generated are anticipated to exceed the costs associated with providing such services, thereby mitigating the impact of the increased costs to the pertinent community services to provide services.
- School district tax revenues are estimated to mostly, if not completely, compensate for the expenses incurred by the public school students generated.
- Conformance to the NYS Building and Fire Safety Codes will partially mitigate potential health and safety impacts on fire response providers.
- The Fire Department will have the opportunity to review future proposed site plans to ensure that their needs, including provisions for emergency access, hydrant locations, sprinkler systems, fire alarms, and smoke and carbon monoxide detection, are properly addressed.
- Site and use specific SEQRA and land use review will assist in addressing any potential impacts to community services at the time a development is proposed.

3.4 Demography and Socio-Economics

3.4.1 Existing Conditions

The following provides an overview of census information for 2000 to 2010 for the local community. The population of the area known as the Mastic Beach Census Designated Place grew in population by 7% between 2000 and 2010 (from 12,082 to 12,930 capita). The number of households grew by over 9% during that period (from 3,871 to 4,231).

Table 3-8 provides a breakdown of ages of the current population which is estimated to be 13,256 persons (based upon projections by The Nielsen Company). The current year median age for this area is 35.9 years, while the average age is 35.7 years. Five years from now, the median age is projected to be 36.4 years.

In 2013, the estimated number of households is 4,378 with majority of households being home to between 1 and 4 people as indicated in **Table 3-9**.

The average household income is estimated to be $73,272 for the current year (2013) and is projected to change over the next five years, from $73,272 to $77,391.

Table 3-8
POPULATION BY AGE, 2013

Age Range (Years)	Number	Percent of Total (%)
0-4	949	7.2
5-9	932	7.0
10-14	967	7.3
15-17	698	5.3
18-20	626	4.7
21-24	742	5.6
25-34	1,555	11.7
35-44	1,839	13.9
45-54	2,184	16.5
55-64	1,579	11.9
65-74	783	5.9
75-84	286	2.2
85 and over	116	0.9
Total	**13,256**	**100.0**
16 and over	10,190	76.9
18 and over	9,710	73.2
21 and over	9,084	68.5
65 and over	1,185	8.9

Table 3-9
HOUSEHOLD POPULATION, 2013

Household Size (persons)	Number	Percent of Total (%)
1	808	18.5
2	1,196	27.3
3	828	18.9
4	777	17.8
5	441	10.1
6	187	4.3
7 or more	141	3.2
Total	**4,378**	**100.0**

3.4.2 Anticipated Impacts

Development will occur over time and based on zoning. The existing zoning will causes an increase in population, once built out. The proposed zoning has been evaluated and it has been determined that any change in residential use potential is very small. It is not expected that the

small difference in population that would result from the small difference in residential yield (4 residences) under the existing and proposed zonings would produce any significant difference in impacts to the village's population or its associated age distribution.

Additional potential for commercial space may result in more available employment opportunities, which is beneficial. Any such change will occur incrementally over time as uses are placed on lands based the proposed new zoning. The differences in the amounts of industrial (3,526 SF) and commercial (38,775 SF) spaces anticipated between development of the soft sites under their existing and proposed zonings is relatively small in consideration of the existing pattern of development in the village. These differences in yields would result in small differences in the numbers and types of employees in the village.

3.4.3 Proposed Mitigation

- As no significant adverse impacts are anticipated with respect to demographics, no mitigation is necessary or proposed.

3.5 Traffic

3.5.1 Existing Conditions

Appendix E contains a traffic engineering analysis of the existing village operating conditions; the following has been taken from that report.

Introduction
In order to determine the potential traffic impacts associated with the proposed changes to the Village of Mastic Beach Zoning Code, existing conditions traffic capacity analyses were conducted at key intersections in the proximity of the areas with the anticipated code changes within the Village. The traffic evaluation included the following:

- Conduct field observations at major intersections in the vicinity of the areas with the proposed zone changes in the Village to identify intersections with high volumes and potential for further review.
- Obtain available traffic data at the identified intersections from the Town of Brookhaven and adjusted to current traffic conditions (2013 traffic volumes) by applying an annual growth factor of 2.45% per year.
- Conduct traffic capacity analyses at these intersections to identify any potential capacity issues.

Field Observations
Several field visits of the village were conducted during peak and off peak period. Based on our field observations, the following locations were identified as high traffic volume intersections within the village:

- Mastic Road at Fairfield Ave/Blanco Drive

- Mastic Road at Neighborhood Road
- Neighborhood Road at Commack Road

Traffic Volumes
Traffic data collected at these locations in 2009 were obtained from the Town of Brookhaven. The 2009 traffic volumes were adjusted to 2013 traffic volumes by applying an annual growth factor of 2.45% (obtained from the NYSDOT LITP 2000 study) for the Town of Brookhaven for a period of 4 years. The adjusted traffic volumes were tabulated to develop the AM and PM peak hour volumes at the identified intersections. The adjusted traffic volumes were utilized in the existing condition capacity analyses.

Capacity Analyses
Level of service (LOS) and capacity analyses for the study intersection were performed using Highway Capacity Software *(HCS 2010)*, prepared by the Federal Highway Administration. HCS 2010 is a series of computer programs strictly adhering to the guidelines set forth in *Highway Capacity Manual 2010 (HCM2010)*. *HCM 2010* contains procedures and methodologies for estimating capacity and determining level of service for many transportation facilities and modes including signalized and unsignalized intersections.

An intersection's (LOS describes its quality of traffic flow. It ranges in grade from LOS "A" (relatively congestion-free) to LOS "F" (very congested). The level of service definition, and threshold values for each level, vary according to the type of control utilized at that intersection.

Table 3-10 summarizes the results of the capacity analyses at the identified intersections. From the review of **Table 3-10**, it can be seen that the study intersections are operating at good levels of service (LOS) ranging from LOS A to LOS C.

3.5.2 Anticipated Impacts

The following has been taken from the traffic engineering analysis presented in **Appendix E**:

> With these LOS results [see **Table 3-10**], it is the professional opinion of Nelson and Pope that the study area has substantial roadway capacity to accommodate a significant amount of development without requiring significant levels of traffic mitigations. However, further review and analyses are recommended for any developments proposed in the Village to estimate actual impacts and develop mitigation measures if necessary.

3.5.3 Proposed Mitigation

- The traffic engineering analysis indicates that there is substantial capacity on the village's roadways to accommodate future traffic growth without requiring significant levels of traffic mitigation. Nevertheless, each future, site-specific development application will be subject to village engineering review and approval, which may include need for traffic mitigation measures.

Table 3-10
LOS SUMMARY
Existing Conditions

Signalized Intersection	Approach	Movement	Weekday AM Peak Hour		Weekday PM Peak Hour	
			LOS	Delay (sec./veh.)	LOS	Delay (secs./veh.)
Mastic Road at Fairfield Road-Blanco Drive	EB	LTR	C	32.8	C	32.0
	WB	L	C	33.8	C	29.2
		TR	C	34.4	C	30.4
	NB	L	A	9.4	A	5.9
		TR	B	10.3	A	8.0
	SB	L	A	9.0	A	5.9
		TR	B	17.1	B	10.0
	Overall	**---**	**B**	**17.1**	**B**	**11.2**
Mastic Road at Neighborhood Road	EB	LTR	A	8.7	B	13.1
	WB	LTR	A	9.0	B	10.6
	NB	LTR	C	29.1	C	29.2
	SB	LTR	C	29.3	C	33.1
	Overall	**---**	**B**	**15.9**	**B**	**18.7**
Neighborhood Road at Commack Road	EB	LTR	A	7.8	C	26.6
	WB	LTR	A	9.5	B	17.9
	NB	LTR	C	29.2	C	25.1
	SB	LTR	C	29.3	C	23.5
	Overall	**---**	**B**	**14.9**	**C**	**23.6**

3.6 Cultural Resources

3.6.1 Existing Conditions

Figure 3-8 presents a portion of the NYS Office of Parks, Recreation and Historic Preservation (OPRHP) map that indicates the presence of known cultural resources, of the village, as well as the proximity to areas that may harbor such (undiscovered) resources. As can be seen, there are no established cultural resources in the Village of Mastic Beach. The Fire Island National Seashore is outside the village boundary, and contains two sites of historic resources.

In addition, portions of the village's western and northern boundaries are within established Archaeo-Sensitive Areas of sites of potential cultural resources within Shirley and Mastic, respectively. Within these areas, future site-specific development applications would require communication with the State Historic Preservation Office (SHPO), to determine the necessity for a detailed site investigation to determine the potential for the presence of cultural resources.

3.6.2 Anticipated Impacts

Based on the absence of any identified cultural resources within the village, it is expected that no adverse impacts to such resources would occur as a result of the proposed action.

As noted above, for those limited portions of the Village of Mastic Beach that are also within the Archaeo-Sensitive Areas of sites in Shirley and Mastic, future site-specific development applications would require communication with SHPO to determine the necessity for a detailed site investigation to determine the potential for the presence of cultural resources.

3.6.3 Proposed Mitigation

- Cultural resource evaluation will occur during review of land use applications and the SEQRA process, if necessary. This review may include contact with SHPO for review, input and approval. If that entity deems it appropriate, additional analysis may be required, or revisions to the application may be deemed necessary by SHPO to mitigate such impacts.

SECTION 4.0

OTHER REQUIRED SECTIONS

4.0 OTHER REQUIRED SECTIONS

4.1 Growth-Inducing Aspects and Cumulative Impacts

Growth-inducing aspects of development are those characteristics that would cause or promote further development, either due directly to the development itself (i.e., "primary" development), or indirectly, as a result of a change in the population, markets or potential for development in that community (i.e., "secondary" development). Direct/primary impacts might include, for example, the creation of a major employment center or institutional facility, installation or extension of infrastructure improvements or the development of a large residential project, particularly if that project were designed for a specific age group. An indirect/secondary impact would cause an increase in the potential for further development in an area, which in turn would result in direct/primary impacts. Cumulative impacts refer to the combined effects of a number of development proposals in an area, where the impacts of all such proposals are multiplied relative to those of each individual proposal, if considered separately.

By design, the proposed action is anticipated to result in growth within the Village of Mastic Beach. However, this is exactly the goal of the sponsoring entity, the Village Board, which is to provide for the type and quality of development in the village necessary to achieve the improved social and economic conditions being sought.

The development expected to result from the proposed action ("per prosed zoning") would also have secondary effects on growth. It is anticipated that this development would contribute to a minor increase in activity for the existing local businesses from the increased customer bases arising from a small increased number of residents. New employment opportunities associated with the office, retail and service-oriented businesses that may result over time will also occur, with associated beneficial economic and fiscal implications.

Construction of the various uses will create short-term job opportunities. While this development would be private in nature (and so would occur at a pace that is not subject to village control), it can be said that his development will create a substantial number of temporary construction jobs. These jobs may be filled first from within the local labor pool. These job opportunities would not require relocation of specialized labor forces or influx of large businesses from outside the area to provide construction support. As a result, construction job-related effects of the proposed zoning are expected to be beneficial and significant, though temporary in duration.

Growth associated with the proposed zoning will result in an increased usage of utilities. Electrical and natural gas services are generally available throughout Long Island (and are presently available in the village), and water mains are located throughout the village as well. Site-specific development will involve mostly infill and intermittent land use proposals, therefore, it is expected that existing utilities will be able to provide the necessary services as new land use occurs. Significant expansion of these utilities/services is not expected to b necessary, though lesser improvements (e.g., individual service connections necessitated by site-specific development) are expected.

It is expected that the development per the proposed zoning would lead to the expansion and improvement of community services in the area, as stimulated by the increased need for services offset by the increased taxes generated. These effects will add to the fabric of the community and support existing programs and special districts for the use and enjoyment of the entire community.

4.2 Adverse Impacts That Cannot Be Avoided

No significant unavoidable area-wide adverse impacts have been identified; the proposed action itself is generic in nature and would not directly result in any physical development within the village. The village and development per the proposed zoning have been characterized, the potential adverse impacts have been assessed, and mitigation measures have been described. Some adverse impacts may still exist for which no mitigation is available. Adverse impacts have been quantified and discussed; for those adverse impacts that cannot be quantified, qualitative discussions have been provided in **Sections 2.0 and 3.0** of this document.

The proposed action involves adoption of the Village Zoning Code. Site-specific impacts related to these regulatory changes will involve physical alterations, but it is premature to evaluate impacts on any individual project site since no specific projects have been proposed. The Village Zoning Code is intended to implement the planning initiatives of the village. Should the Zoning Code be adopted by the Village Board, it is recognized that redevelopment would be expected to occur. Potential physical impacts resulting from possible re-development (based on a build out analysis per the proposed zoning, see **Section 1.4**) were analyzed in **Sections 2.0 and 3.0** of this document. The potential adverse impacts that were identified in connection with the development that may occur as a result of the proposed zoning will be minimized where possible, but this section acknowledges those adverse impacts that may still occur, as follows:

- Despite the measures taken to mitigate dust impacts during construction (such as soil wetting, etc.), temporary increases in the potential for fugitive dust may still occur. Such conditions would be temporary and controlled as well as possible at the source.
- Temporary increases in truck traffic and noise will occur during the construction period of each property. Activity will be conducted in conformance with village requirements for construction hours and noise management.
- There will be increases in vehicle trips generated on area roadways, with consequent impacts on the LOS at nearby intersections (though a traffic assessment has found that there is capacity for additional growth on the roads within the community).
- There will be increased total water consumption associated with the new development, with consequent requirements to increase the service system of the SCWA. New infill development and limited growth which will occur over time is not expected to over-burden this resources; SCWA is expected to make the necessary improvements, if necessary, to continue to provide water according to their tariffs and pursuant to their charter.
- There will be increased total wastewater generation associated with the new development, with consequent requirements to provide for wastewater treatment. In such cases, conformance to

SCSC Article 6 requirements will be necessary, thereby minimizing potential impacts to groundwater resources.

- There will be an increased potential need for school and emergency services (police, fire, and associated ambulance services, though the increased taxes generated would offset the costs of these services).
- There will be increased demands on the energy services of LIPA and National Grid, which may entail expansions of these service networks (these impacts to be offset by fees paid by the new development). These energy service providers will be notified as part of future village reviews of site-specific applications.

4.3 Irreversible and Irretrievable Commitment of Resources

This subsection is intended to identify those natural and human resources discussed in **Sections 2.0 and 3.0** that will be consumed, converted or made unavailable for future use as a result of the proposed action. It is anticipated that the proposed action will result in irreversible and irretrievable commitment of resources, as follows:

- Material used for construction of site-specific development, including but not limited to: wood, asphalt, concrete, fiberglass, steel, aluminum, etc.
- Energy used in the construction, operation and maintenance of site-specific development, including fossil fuels (i.e., oil and natural gas).
- Potable water to be consumed on a daily basis for the operation of site-specific development.

4.4 Effects on the Use and Conservation of Energy

An increase in the consumption of energy resources would typically be expected from an increase in development in the village. In general, the buildings associated with the proposed action will be constructed in conformance with New York State and Village Zoning Code requirement and standards, which would minimize energy use. It is expected that site-specific development resulting from the proposed action will utilize up-to-date, energy-efficient building materials (e.g., insulation, windows, weather stripping, door seals, etc.) and mechanical systems (e.g., air conditioners, heating systems, HVAC systems, water heaters, heat pumps, etc.), which would minimize the amount of energy resources required. Incorporation of such measures is not only required by New York State, but is a sensible building practice, particularly in light of the increasing cost of energy resources. Water-saving plumbing fixtures can be specified, in accordance with current building requirements and practice of the trade. Installation of low-flow toilets, showers, sinks and equipment would reduce unnecessary water loss, which would translate into conservation of the energy resources required to heat some of this water.

The following general energy-conserving measures may be incorporated in the new construction:

- Utilize energy-efficient and cleaner-burning natural gas systems; consider alternative heating/cooling methods including geothermal, heat pumps and/or solar roof systems.

- Reduce energy consumption through use of superior building insulation materials (i.e., insulations, windows, weather stripping, door seals, etc.).
- Utilize water-saving devices such as low-flow toilets, automatic faucet shut-offs and related equipment would to reduce unnecessary water loss and resultant pumping energy loss.
- Utilize energy-efficient low wattage bulbs for facility exterior illumination and interior lighting wherever possible.
- Incentive-based use of "green development" options such as green roofs, grey-water and rainwater recycling, roof gardens, community gardens, etc.

As discussed above, it is expected that future site-specific development undertaken in conformance with the proposed action will incorporate substantial energy-saving features, which may include building materials, site and project layout and design characteristics, mechanical systems and use procedures. However, as there are no applications in a preliminary design stage (and this document represents a *generic* impact evaluation), a roster of these features is not presently available. It is possible that the number and extent of these sustainable features would justify certification under the US Green Building Council's LEED®-ND Program. It is expected that final decisions whether to seek certification will be made for each specific site plan application.

There will be an increase in energy use during the construction phase of the site-specific developments. These impacts are expected to be of short duration, and the long-term energy demand in the village is expected to remain stable or decline as more energy-efficient development is constructed. In summary, it is not anticipated that the proposed action will result in significant adverse impacts on the availability of energy resources in the village.

SECTION 5.0

ALTERNATIVES

5.0 ALTERNATIVES

5.1 Introduction

SEQRA and its implementing regulations at 6 NYCRR Part 617.9(b)(5)(iii)(v) require the consideration and evaluation of a range of reasonable alternatives to a proposed action that are feasible, considering the objectives and capabilities of the project sponsor. This document includes one alternative: No Action, which assumes that the proposed action is not implemented, and that the existing Village Zoning Code is not changed.

For clarity, it is restated herein that the proposed action is the adoption of a zoning code for the Village of Mastic Beach. It is important to note that, in order to satisfy SEQRA requirements, this DGEIS analyzes the impacts associated with the difference in yields between development of the soft sites that would occur under the village's existing and proposed zoning (see **Section 1.4**).

5.2 No Action - Build-Out Under Existing Zoning

5.2.1 Description of Build-Out Under Existing Zoning

This alternative assumes that the proposed action is not undertaken, and that the village would remain as it is currently zoned, so that all future development would occur under the existing Village Zoning Code. Analysis of full build-out under existing zoning is useful as it identifies the anticipated character of the village if no code and/or map amendments are undertaken, and if market conditions change and/or if growth is projected and applied over a greater period of time.

The full build-out of the village under existing zoning is tabulated in **Table 1-6**, and assumes 175,817 SF of commercial space and 25 residences.

5.2.2 Anticipated Impacts

Topography

Considering that the Village is topographically flat and is mostly developed already, significant amounts of grading and changes to topography would not be expected from construction on the 22.84 acres of soft sites. There would be localized impacts to topographic resources from excavations for building foundations and utility connections and systems, and for roadway foundations and parking areas. However, due to the low relief of the village, and absence of natural topographic features, major grading operations (cut and fills) would not be necessary. Thus, no significant long-term adverse impacts would be expected with respect to topography in this scenario.

Surface and Subsurface Soils

Development of the soft sites under their existing zonings would require disturbance of the surface and subsurface soils of these properties, for building foundations and utility connections and systems, roadway foundations and parking areas. However, given the largely developed nature of the village and the relatively small amount of land that would be affected (22.84 acres in total), significant impacts to these soil resources would not be expected.

Groundwater and Surface Water

Groundwater - Development of 22.84 acres of the soft sites would incrementally increase the volume of stormwater runoff that would be managed within the village, as well as the volume of sanitary wastewater that must be treated. However, all development would undergo thorough village, county and NYSDEC engineering and regulatory reviews and evaluations, so that conformance to the applicable design regulations would minimize the potential for adverse or significant impacts to the quality or quantity of groundwater resources.

Public Water Supply - As discussed in **Section 2.3.1**, the SCWA reports no significant adverse water quality impacts in the groundwater in its Distribution Area #20, which is supplied to the village. As noted above, all new construction associated with the existing zoning will be required to conform to all applicable requirements for sanitary and drainage system design and operation, and so no impacts to groundwater quality are anticipated to this resource. Additionally, the relatively small amount of development that could occur on the sift sites, which would encompass 22.84 acres, would not be large enough to significantly impact the ability of the SCWA to properly serve its existing customer base, while serving this new development. As a result, no significant adverse impacts to the public water supply would be expected.

Surface Water - As noted above, the amount of stormwater runoff generated in the village (and requiring proper management) would be incrementally increased from its current volume by the development of 22.84 acres of soft sites under their associated existing zonings. With respect to surface water resources, this increase would incrementally increase the potential for impacts from entrained contaminants in uncontrolled runoff. However, given the small amount of surfaces that could be developed (so that the volume of runoff concerned would be small as well), and the reviews and approvals that would be applied to each development proposal, it is anticipated that positive impacts to surface water quality would occur through the reduction of stormwater discharges that may currently impact down-gradient wetlands or surface waters of Narrow Bay, Moriches Bay or the creeks and inlets of those bodies.

Water Resource Plans - Reviews of the 208 Study, the NURP Study, and the Narrow Bay Plan indicate that development of the soft sites under their existing zonings would conform to the relevant recommendations of these plans. More specifically, the No Action alternative would be required to conform to SCSC Article 6 and to applicable village and/or county requirements for control of stormwater runoff. These measures conform to the 208 Study. For the NURP Study, concerns regarding chloride contamination to water resources would be mitigated by the incremental increase in impervious surfaces that could be subject to roadsalting. In addition, site-specific land use will be subject to subdivision, site plan and building permit review, at

which time best management practices for stormwater management could be evaluated. Finally, the Narrow Bay Plan notes that the Mastic/Shirley peninsula is highly susceptible to flooding, due to its low elevation and its location on the shores of Narrow Bay and Moriches Bay. Much of the development that would occur under the No Action alternative would occur on scattered lots, and would not represent a significant amount of growth, as this scenario concerns only 22.84 acres.

In consideration of the above discussions regarding surface and groundwater resources, it would not be expected that significant and/or adverse impacts to these resources would occur for the No Action alternative.

Vegetation and Wildlife

Vegetation, Wildlife & Habitats - The potential for impacts to the ecological resources of the village are not anticipated to be significant for the No Action alternative, in consideration of the following:

- the soft sites are distributed among developed areas and so are presently susceptible to development.
- current SCDHS, State and Federal regulations prohibit development within vegetated wetlands.
- some clearing of natural vegetation would occur with development of a specific parcel, but would occur in conformance to applicable village standards and review.
- local wildlife would be displaced by site clearing. However, as the village is mostly developed, wildlife that may be present would be adapted to the limited amounts of suburban environment available.
- the NYNHP did not identify any rare, threatened or endangered species in the areas that may be developed (the NYNHP did identify one threatened plant in the vicinity of Johns Neck Creek, but this plant thrives in wetlands habitats, which cannot be developed).

Regulatory Conditions - As discussed in **Section 2.4.1,** there are State and Federal wetland regulations that control the potential for development within or adjacent to the wetland resources of the village. As a result, these regulations would apply to the No Action alternative; development within regulated wetlands would not be permitted, and development of any parcel within the State regulated adjacent area for freshwater or tidal wetlands would require a permit from the NYSDEC. Improvements below spring high water or within non-state regulated wetland areas would also require a permit from the ACOE and NYSDOS.

The above discussions support the conclusion that development of the village's soft sites under their existing zonings would not result in significant and/or adverse impacts to the vegetation, wildlife or wetland resources of the village.

Land Use, Zoning and Plans

Land Use - The amount of growth associated with the No Action alternative would incrementally increase the acreages of residential and commercial land in the village while reducing the vacant category (by 22.84 acres). There would be only a minor change in the pattern of land uses, as vacant land would be converted to residential and commercial uses, but these sites would be

located in proximity to uses similar in nature, so that the effect would be primarily to eliminate infill sites.

However, the effect of this infill development would be to reinforce a land use trend that does not reflect the goals or desires of the village. As discussed in *Zoning* (below), the village's existing zoning regulations do not explicitly provide for the types of uses that already exist or are desired by the village's inhabitants. For example, a majority of land in the village is zoned A-1, yet most lots are well under the 40,000 SF minimum for this zone. As a result, current village practice is to grant numerous variances in connection with land use approvals. This is a clumsy practice that the proposed action is designed to end. At present, there is provision for commercial growth, but not for needed and desired waterfront uses, mixed residential/business districts, or industrial use in the village. Addressing the lack of these districts is another goal of the proposed action.

In general, the No Action alternative would not reconcile the village's existing or future land use pattern to its existing or future zoning pattern, so that the benefits sought by the village in the proposed action (see **Section 1.1.3**) would not be achieved.

Zoning - In the No Action alternative, the village's existing zoning regulations would provide for additional commercial use, but does not provide for needed and desired waterfront uses, smaller lot subdivisions, mixed residential/business districts, or industrial use. In addition, this scenario would not enable the village's land use pattern to conform to its zoning pattern, so that the existing disparity between these characteristics would not be addressed. As a result, the benefits sought by the village in the proposed action (see **Section 1.1.3**) would not be realized.

At present, the Town zoning presently in-place is not reflective of the pattern of development that has historically occurred in the village. For example, a majority of land in the village is zoned A-1, yet most lots are well under the 40,000 SF minimum for this zone. As a result, current village practice is to grant numerous variances in connection with land use approvals. The No Action alternative would not reconcile this situation.

Plans - As noted in **Section 3.1.1**, the Village of Mastic Beach does not currently have a land use or master plan in place, so that no impact to such a resource from the No Action alternative could occur.

In consideration of the above discussions, the No Action alternative represents a series of significant adverse impacts that would continue to occur with respect to land use and zoning in the Village of Mastic Beach.

Community Character

Visual Character - The No Action scenario would provide for incremental increases in residential and commercial development in the village, on the 22.84 acres of residentially and commercially zoned soft sites. This growth would be expected to conform to or complement the aesthetics of development that surrounds these sites, and so impacts to the village's aesthetics

would not be expected. However, such development may not occur on soft sites that the community would prefer to see developed either residentially or commercially. In these cases, there would be an adverse impact on visual character. Such a situation would be contrary to a socially, economically and environmentally viable community. Likewise, there would be no sense of civic pride and "ownership" in the community. Therefore, this alternative would be very unlikely to result in an attractive and economically sustainable environment and ultimately would not have the elements necessary for a successful community.

Noise - The potential for adverse impacts from residential noise would not be expected to be significant, as this type of use does not, in and of itself, generate a significant amount of noise. I addition, there would be only 29 new residences in the No Action scenario, which in itself is not a significant number of units, particularly as the village is largely developed with residences already.

For the new commercial growth in the No Action alternative, it is expected that truck traffic and HVAC systems would be the primary sources of noise. As noted above, it is not expected that significant changes in the pattern of village land uses would result from the No Action alternative, so that the new commercial development would occur in established commercial areas. This would tend to minimize the potential for adverse impacts to the noise environment. In addition, new commercial facilities would use new HVAC systems that are generally quieter compared to individual units and older systems. Finally, any and all new non-residential development will be required to conform to the Village Noise Code. Finally, new development proposals will be subject to village review, which will include consideration of noise-reducing or mitigating measures.

As a result, the character of the village's noise environment is not expected to change significantly.

Community Services

Taxes - **Table 3-6** indicates that the No Action alternative would generate a significant amount of tax revenues for the village, town and county. This represents a significant beneficial impact.

Schools - Development under the assumptions of the No Action alternative would produce a total of 18 school-age children, which would represent a minor potential increase in enrollments for the William Floyd CSD, and an increase in district expenditures of $252,258 annually.

Police - The increased development of the No Action alternative would increase the patrol responsibilities of the SCPD. However, this incremental increase would not be sufficient in size or character to cause a significant adverse impact on the SCPD's ability to provide adequate service protection. There would, nonetheless, be an increase in taxes generated on the soft sites that would tend to offset the added costs of service provision. The SCPD would have the opportunity to provide input on proposed development plans during the site plan review of individual projects, so that appropriate safety/security measures could be determined at that time.

Fire - The residential and commercial growth associated with the No Action scenario would increase the responsibilities of the Mastic and Mastic Beach Fire Departments. However, these would be incremental increases, and would not be sufficient in size or character to cause a significant adverse impact on either department's ability to provide protection. There would be increases in taxes generated on the soft sites that would tend to offset the added costs of service provision. The fire departments would have the opportunity to provide input on proposed development plans during the site plan review of individual projects, so that appropriate safety/security measures could be determined at that time.

Sewer - As there are no publicly-accessible STPs in the village, there would be no impacts to such service from the No Action alternative. All development in the No Action alternative would be required to conform to SCSC Article 6 regulations as part of individual site plan reviews.

Water - The amount of water required to serve the No Action alternative is attributable to only a small amount of the village's area (22.84 acres), and does not represent any significant type or disproportionate water consumption (25,082 gpd; see **Table 1-6**). As a result, this scenario is not expected to be sufficiently large to significantly impact groundwater supplies, or the SCWA's ability to properly serve its customers.

Recreation - It is expected that the increases in the numbers of residents (77) and of school-age children (18) in the No Action alternative would not be large enough to significantly impact the existing levels of usage of the village's park areas.

Demography and Socio-Economics

It is not expected that the small increase in residents from the 25 homes in the No Action alternative would represent a significant or adverse impact on the village or to its age distribution. It is not expected that a new demographic cohort would be introduced, nor would any age cohort be significantly increased by these new residents.

With respect to commercial spaces, there would be an increase in employment from the No Action alternative. There new employees could potentially have an adverse impact on the village, primarily through their increased vehicle trips, but could also have a beneficial impact from increased patronage and sales at other commercial locations (stores, restaurants, etc.).

Traffic

Development associated with the No Action alternative would incrementally increase the number of vehicle trips generated in the village, which would result in adverse impacts on the flow of traffic as well as on the operation of the intersections through which these new trips would flow. However, as discussed in **Section 3.5.1**, traffic flow conditions in the village are currently excellent, so that the incremental increase in vehicle trips would be evaluated on a case-by-case basis in order to determine the potential for adverse and/or significant impacts. Village review of each site-specific development proposal would evaluate the incremental increase in trip generation and impact, so that any necessary or appropriate roadway or traffic control

improvements would be required.

Cultural Resources

Based on the absence of any identified cultural resources within the village, it would be expected that no adverse impacts to such resources would occur in association with the No Action alternative. In those portions of the village that are within the Archaeo-Sensitive Areas of sites in Shirley and Mastic, future site-specific development proposals would require communication with SHPO to determine the necessity for a detailed site investigation to determine the potential for the presence of cultural resources.

5.2.3 Conclusions

The No Action alternative assumes that the village zoning will remain unchanged, and that the soft sites are developed accordingly. The outcome of this assumption is that, first and foremost, the beneficial impacts of the proposed action would not be realized in the village, and in fact the impacts associated with this alternative would run counter to the goals and objectives of the village. The current land use and zoning mixes and patterns will continue – which is to say that a strong chance for the continued presence of unwanted land uses in undesirable locations would occur, with implications for future development in the village that will be unacceptable to its residents. In summary, the No Action alternative is not at all consistent with the goals or desires of the village.

SECTION 6.0

FUTURE ACTIONS

6.0 FUTURE ACTIONS

This document is a DGEIS that analyzes the potential impacts associated with the adoption of a Village Zoning Code. The SEQRA process will culminate with a Findings Statement on the Final GEIS. 6 NYCRR Part 617.10(c), states *"Generic EISs and their findings should set forth specific conditions or criteria under which future actions will be undertaken or approved, including requirements for any subsequent SEQR compliance. This may include thresholds and criteria for supplemental EISs to reflect specific significant impacts, such as site specific impacts, that were not adequately addressed or analyzed in the generic EIS."*

More specific guidance is provided in Part 617.10(d), which states *"When a final generic EIS has been filed under this part:*

(1) No further SEQR compliance is required if a subsequent proposed action will be carried out in conformance with the conditions and thresholds established for such actions in the generic EIS or its findings statement;

(2) An amended findings statement must be prepared if the subsequent proposed action was adequately addressed in the generic EIS but was not addressed or was not adequately addressed in the findings statement for the generic EIS;

(3) A negative declaration must be prepared if a subsequent proposed action was not addressed or was not adequately addressed in the generic EIS and the subsequent action will not result in any significant environmental impacts;

(4) A supplement to the final generic EIS must be prepared if the subsequent proposed action was not addressed or was not adequately addressed in the generic EIS and the subsequent action may have one or more significant adverse environmental impacts."

The Findings Statement will establish a basis for a decision on enacting the proposed zoning, and where applicable, will include conditions establishing thresholds and requirements for supplementary impact analyses and mitigation measures for future development under the proposed action. Future site-specific actions will undergo a SEQRA review to determine the appropriate level of review in conformance with 6 NYCRR Part 617.10(d). If, during the site-specific review of development applications, potential significant adverse environmental impacts are identified that were not previously or adequately analyzed as part of this SEQRA review, additional site-specific review including technical studies and/or a Supplemental GEIS, may be required. The information submitted with the application for each such future project will be used by the entity having jurisdiction as the basis for this determination.

Based on the results of the generic impact analyses prepared in this DGEIS, the following actions may be required for future site-specific development project:

<u>Topography, Surface and Subsurface Soils & Water</u>

- Geotechnical Evaluation: Subsurface soil conditions will be assessed for the purpose of structural and drainage system design as part of the site plan application review. If unsuitable subsoils are

found in connection with site-specific development, techniques including deep compaction or over-excavation and replacement of unsuitable fill materials may be utilized. Development areas would be stabilized, as determined by a Geotechnical Engineer, prior to construction of structural elements.

- Erosion Control: Erosion Control and Construction Phasing Plans will been prepared for individual site developments during site plan review that will provide protection methods that will be utilized during construction to control transport of sediment and stormwater runoff during construction activities.
- Stormwater Management: New development projects will be required to prepare drainage plans that retain all stormwater runoff on site in accordance with village and, if applicable, county requirements. For those individual projects that involve one or more acre of disturbance, a SWPPP must be prepared pursuant to the requirements of Village Code Chapter 9E, and drainage systems must be designed to provide water quality and quantity requirements pursuant to the 2010 NYS Stormwater Management Design Manual.
- Land Use Application Review: Future subdivision, site plan and building permit review will involve SCDHS and village review for conformance with sanitary density, sanitary discharge and stormwater handling requirements.

Land Use & Zoning

- Hazardous Materials Management: Where development or re-development is proposed, proper evaluation of sites for potential environmental effects from past use will occur through the lending industry and/or potentially through village review to ensure that sites are suitable for development or re-development. Phase I Environmental Site Assessments ("ESAs") are typical for any pre-purchase or bank lending situation. An ESA will identify the need for testing to determine if Recognized Environmental Conditions (RECs) are present which require further testing, remediation, abatement, regulatory oversight or other appropriate action. Any redevelopment or property transfer will be subject to the necessary regulatory steps and agency oversight to properly investigate, and remediate if necessary, RECs warranting such action. Remediation activities are required to be completed according to the protocols, procedures, standards and documentation requirements of the appropriate supervising entity, such as NCDOH, NYS Department of Labor, Nassau County Fire Marshal and/or NYSDEC.
- Land Use Application Review: Future subdivision, site plan and building permit review will involve village review for conformance with the new zoning.

Community Character

- Site-Specific Noise and Visual Assessments: As development is proposed, the land use review and SEQRA process will allow for consideration of potential noise and visual impacts. Since new development will be primarily infill of existing vacant parcels in a manner determined to be appropriate under new zoning, it is not expected that significant noise or visual impacts will occur. The village should seek to review architecture of proposed buildings to ensure that it is consistent with the architectural character sought in the village.
- Land Use Application Review: Future subdivision, site plan and building permit review will involve village review and will consider aspects related to community character.

Community Services

- Land Use Application Review: Future subdivision, site plan and building permit review will involve village review and the Fire Department will have the opportunity to provide input on applications to ensure that their needs, including provisions for emergency access and hydrant locations. Fire and building construction code requirements will address the need for sprinkler systems, and it is expected

that alarms and smoke and carbon monoxide detection will be incorporated into building construction. Police services are generally addressed through SEQRA review of larger projects warranting input on community services and the ability of the police department to provide protection services.

Traffic

- Traffic Mitigation: At the time of subdivision and/or site plan review, trip generation will be reviewed as part of the environmental assessment form submission. This information will serve as a basis to determine if additional traffic analysis and/or mitigation is warranted. Adequacy of site access, parking and pedestrian safety will also be reviewed as a part of the individual site plan review process.

Cultural Resources

- Cultural Resource Evaluation: This may include contact with the SHPO for review, input and approval. If that entity deems it appropriate, additional analysis may be required, or revisions to the application may be deemed necessary by SHPO to mitigate such impacts.

Construction

- Construction Management Plans: Such plan may be required for each site-specific development project. A Construction Management Plan would be comprised of a number of lower-order plans as necessary, and may include a Construction Traffic Management Plan, a SWPPP (for erosion and stormwater control both during and post construction), a Parking Management Plan, and/or a Remediation Plan.

All applications for new development projects will continue to be required to adhere to SEQRA procedures and requirements. This means that all such future development projects would be subject to individual approvals processes, including site plan review and site-specific impact review or consistency review with the Findings Statement, under SEQRA. Adherence to this procedure will ensure that all future development in the village complies with SEQRA, and conforms to established land use controls, minimizes potential adverse environmental impacts, and provides consistency with established village policy and community goals as outlined in the Village Zoning Code.

SECTION 7.0

REFERENCES

7.0 REFERENCES

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FIGURES

APPENDICES

APPENDIX A

SEQRA-RELATED DOCUMENTS

Appendix A-1
Positive Declaration

Village Board of Trustees

April 17, 2013

RESOLUTION 117 -2013

RESOLUTION

ADOPTING LEAD AGENCY STATUS FOR THE PURPOSE OF SEQRA REGARDING THE PROPOSED ZONING CODE FOR THE VILLAGE OF MASTIC BEACH

The Board of Trustees of the Incorporated Village of Mastic Beach, duly convened, does hereby resolve as follows:

WHEREAS, in 2012 THE VILLAGE ZONING COMMISSION, as directed by the Village Board of Trustees, prepared a proposed Zoning Code for the Village of Mastic Beach that would more accurately reflect the goals and desires of the Village than the Zoning Code of the Town of Brookhaven that was used on a temporary basis when the Village of Mastic Beach was established in 2010; and

WHEREAS, in January 2013, THE VILLAGE BOARD OF TRUSTEES accepted the VILLAGE ZONING COMMISSION"S proposed Zoning Code for the Village of Mastic Beach (hereafter, "the Proposed Action"), and commenced its review of the proposed Zoning Code; and

WHEREAS, SEQRA Part 617.6 provides a means for an agency to coordinate with other agencies involved in the approval of the Proposed Action (hereafter, "the Involved Agencies") to determine the most appropriate Lead Agency for review of a Proposed Action; the regulation provides a thirty (30) day time period from the date of service, or if all Involved Agencies respond prior to the expiration of the 30 day time period, the Lead Agency may be designated; and

WHEREAS, THE VILLAGE BOARD OF TRUSTEES, circulated a letter of coordinated review with the Involved Agencies, and in that correspondence, declared its intent to serve as Lead Agency in connection with the environmental review of the Proposed Action; and

WHEREAS, no Involved Agency objected to the VILLAGE BOARD OF TRUSTEES intent to assume Lead Agency and the allotted thirty (30) day time period required for coordination has expired; and

WHEREAS, THE VILLAGE BOARD OF TRUSTEES, as Lead Agency, caused a review of the potential impacts of the Proposed Action to be prepared, which analysis concluded that one or more potential significant adverse impacts may be expected; now therefore be it

RESOLVED, that the VILLAGE BOARD OF TRUSTEES hereby declares itself Lead Agency in the review of the Proposed Action; and

RESOLVED, that the VILLAGE BOARD OF TRUSTEES hereby adopts a Positive Declaration under SEQRA Part 617.7; and

RESOLVED, that the VILLAGE BOARD OF TRUSTEES, after due deliberation, determines that a full Generic Environmental Impact Statement (GEIS) should be prepared; and

RESOLVED, that the VILLAGE BOARD OF TRUSTEES hereby elects to conduct a Public Scoping Period to accept written comments on the Draft Scope (dated April 17, 2013) until the end of business on May 10, 2013 to identify potential issues or suggest specific studies, protocols, and to facilitate the preparation of a Draft GEIS; and will accept oral comments on the Draft Scope at the Village Board of Trustees Public Hearing on May 1, at 5:00 p.m., at the Town of Brookhaven Nutrition Center, 369 Neighborhood Road, Mastic Beach, NY 11951New York; and

IT IS FURTHER RESOLVED that the Village Clerk is hereby directed to cause this Resolution to be published in the official newspaper of the Incorporated Village of Mastic Beach and the New York State Department of Environmental Conservation Environmental Notice Bulletin; and is directed to forward copies of the Draft Scope dated April 17, 2013, to all involved and interested agencies, and any other individual who requests a copy, along with this

notice and instructions that any written comments shall be submitted to the record via the Village Clerk's office through May 10, 2013.

Aye	Nay		Aye	Nay	
_1_	___	Mayor Biondi	_X_	___	Trustee Stiriz
_2_	___	Trustee Cappiello	_X_	___	Trustee Busa
ABSENT		Trustee Morrow			

Dated: April 17, 2013

Virgilia C. Gross - Village Clerk

INCORPORATED VILLAGE OF MASTIC BEACH
VILLAGE BOARD OF TRUSTEES
427 Neighborhood Road
Mastic Beach, New York 11951

STATE ENVIRONMENTAL QUALITY REVIEW ACT
POSITIVE DECLARATION

NOTICE OF INTENT TO PREPARE A GENERIC ENVIRONMENTAL IMPACT STATEMENT FOR THE ADOPTION OF VILLAGE OF MASTIC BEACH ZONING CODE

Lead Agency:	Incorporated Village of Mastic Beach Village Board of Trustees
Contact:	Bill Biondi, Mayor
Address:	427 Neighborhood Road Mastic Beach, NY 11951
Date:	April 17, 2013

This notice is issued pursuant to Title 6 of the New York Code of Rules and Regulations (6 NYCRR), Part 617 of the implementing regulations pertaining to Article 8 (State Environmental Quality Review – SEQR) of the New York State Environmental Conservation Law.

The lead agency has determined that the proposed action described below may have a significant effect on the environment and therefore a Generic Environmental Impact Statement (GEIS) for the Adoption of Village of Mastic Beach Zoning Code will be prepared.

Title of Action:	Adoption of Village of Mastic Beach Zoning Code
SEQR Status:	Type I according to 6 NYCRR, Part 617.4(b)(1)
Description of Action:	The proposed action is the initial adoption of the Village of Mastic Beach Zoning Code and Village of Mastic Beach Zoning Map. The proposed zoning includes eight zoning districts and one floating zoning district. The zoning districts are comprised of three residential districts, one residential/business district, three business districts (including the floating zone), one industrial district, and one waterfront district. Each district has use and dimension regulations established in the Village of Mastic Beach Zoning Code.
Location:	Village of Mastic Beach, Suffolk County, New York

Reasons Supporting This Determination:

1. The draft zoning code, draft zoning map and supporting Environmental Assessment Form (EAF), Part 1 have been reviewed pursuant to the Criteria for Determination of Significance contained in 6 NYCRR, Part 617.7.

2. A comparison of the Village's existing and proposed zoning codes reveals that there are changes in the type and amount of development that could occur on the remaining developable lots in the Village under these two codes. Consequently, there would be differences in the impacts that would occur from such development scenarios; it is these impacts that warrant analysis in the context of the required GEIS. Specifically, the GEIS will evaluate potential impact differences for the following resources and issues:

    a. Change in surface grade and soil profile of any site on which development is proposed.
    b. Soil impacts associated with erosion occurring during construction and/or grading activities.
    c. Changes in the quantity and/or quality of stormwater recharged.
    d. Changes in the quantity and/or quality of groundwater beneath the Village.
    e. Potential impacts to the volume and/or pattern of stormwater runoff.
    f. Change in the ecological character of the Village, and impact on flora and fauna from development, including impacts to freshwater and tidal wetlands.
    g. Changes to the pattern of land uses and zoning types in the Village, based on an evaluation of the maximum potential change in use and density.
    h. Conformance with Village comprehensive planning goals.
    i. Impacts to Village character, as expressed in its aesthetics, land use pattern and noise levels.
    j. Impacts on the use and availability of the community services and utilities serving the area.
    k. Change in tax revenue under a full build-out scenario from the proposed zoning.
    l. Potential changes in population and the potential number of school-aged children.
    m. The proposed action may result in new retail and/or commercial spaces, which would create new employment opportunities.
    n. Impacts on local roadways and intersections due to any changes in the vehicle trip characteristics of the subject site.
    o. The potential for impacts to pre-historic and/or historic-era cultural resources, whether known or undiscovered, should be evaluated.

For Further Information, Contact:

Bill Biondi, Mayor
Incorporated Village of Mastic Beach
Village Board of Trustees
427 Neighborhood Road
Mastic Beach, NY 11951
Telephone: (631) 281-2326

Copies of this Notice Have Been Sent to:

Commissioner, NYSDEC
NYSDEC, Region 1 Office, Stony Brook
Involved Agencies
Parties of Interest

Appendix A-2
Final Scope of DGEIS

Village Board of Trustees

May 14, 2013

FINAL SCOPE
FOR THE
DRAFT GENERIC ENVIRONMENTAL IMPACT STATEMENT (DGEIS)
FOR THE
Adoption of Zoning Code for the Village of Mastic Beach

May 14, 2013

INTRODUCTION

This document is the Final Scope of the issues and analyses to be included in the Draft Environmental Impact Statement (DGEIS) that will be prepared for the **Adoption of Zoning Code for the Village of Mastic Beach**. The Board of Trustees of the Incorporated Village of Mastic Beach (hereafter, the Village Board) is proposing to replace the Village's existing zoning code (which duplicates the Town of Brookhaven's zoning code, and was adopted on an interim basis when the Village of Mastic Beach was established) with its own zoning code.

The Village of Mastic Beach is located in the southern portion of the Town of Brookhaven, Suffolk County, Long Island, New York. The Village is approximately 2,423 acres in size, of which approximately 2,077 acres are dry land and therefore subject to zoning regulations under this proposed action. As such, for purposes of this document and the EIS to be prepared subject to this document, the terms *"Village", "project site"* and *"subject site"* refer to the zoned acreage, and may be used interchangeably.

A Draft Generic EIS has been required by the Village Board as "lead agency" designated pursuant to the New York State Environmental Quality Review Act (SEQRA). In that capacity, the Village Board finds that a DGEIS is needed to address potential significant adverse environmental issues, has issued a Positive Declaration, and has elected to conduct formal scoping pursuant to Title 6, New York Code of Rules and Regulations (6 NYCRR) Part 617.8.

In general, the overall generic EIS is composed of two separate documents: the "Draft" GEIS and the "Final" GEIS. The Draft GEIS presents a detailed description of the proposed action, identifies and analyzes any potential impacts (whether adverse of beneficial), assesses their significance, describes potential mitigating measures of the action, and describes/analyzes potential alternative actions that may be taken to achieve the goals being sought. The Final GEIS (FGEIS) presents all written comments on the proposed action received during public and agency review period, as well as written and verbal comments received during and subsequent to the public hearing (if held). The FGEIS also presents the sponsor's responses to all substantive comments received.

Under SEQRA Part 617.10, a Generic EIS may be used to assess the environmental impacts of:

(1) a number of separate actions in a given geographic area which, if considered singly, may have minor impacts, but if considered together may have significant impacts; or
(2) a sequence of actions, contemplated by a single agency or individual; or
(3) separate actions having generic or common impacts; or
(4) an entire program or plan having wide application or restricting the range of future alternative policies or projects, including new or significant changes to existing land use plans, development plans, zoning regulations or agency comprehensive resource management plans.

The proposed action is described by (4) above and involves only a change in the Village of Mastic Beach Zoning Code with no site-specific development proposals. After completion of the DGEIS and FGEIS, the Village Board, as lead agency, will then be responsible for the preparation of a Findings Statement, which will conclude the SEQRA review process.

DRAFT SCOPE PROCESS

As set forth in the New York State Department of Environmental Conservation (NYSDEC) SEQRA Handbook (NYSDEC, 2010) available on the NYSDEC website (http://dec.state.ny.us), the scoping process has six objectives:

- Focus the DEIS on the potentially significant adverse environmental impacts.
- Eliminate non-significant and non-relevant issues.
- Identify the extent and quality of information needed.
- Identify the range of reasonable alternatives to be discussed.
- Provide an initial identification of mitigation measures.
- Provide the public with an opportunity to participate in the identification of impacts.

This scope has been prepared to facilitate the environmental review process, seek public comment and constructive input, and provide a basis for informed decision-making, in accordance with SEQRA, Article 8 of the New York Environmental Conservation Law and the regulations promulgated thereunder as 6 NYCRR Part 617. As stated in SEQRA's implementing regulations, *"the primary goals of scoping are to focus the EIS on potentially significant adverse impacts and to eliminate consideration of those impacts that are irrelevant or nonsignificant."* Scoping is an optional process, but is commonly performed, especially on large projects. When scoping is done, it must include *"an opportunity for public participation."*

Copies of the Draft Scope were made available at the Village of Mastic Beach Village Hall, located at 427 Neighborhood Road, Mastic Beach, NY 11951, and on the Village website (http://www.masticbeachvillageny.gov).

The Village Board held a scoping meeting on May 1, 2013 at 5:00 PM at the Town of Brookhaven Nutrition Center, 369 Neighborhood Road, Mastic Beach, NY 11951 and provided a time period for written comments on the Draft Scope (written correspondence or email to the Village Clerk) until the close of business on May 10, 2013. No substantive comments were received specific to the Draft Scope either at the May 1 scoping meeting or through written

comments. As a result, the Final Scope is consistent with the Draft Scope in terms of technical and content issues identified to be addressed in the DGEIS.

The Final Scope sets forth the analyses and methodologies that will be used in the preparation of the DGEIS. The Final Scope will be forwarded to all involved and interested agencies, including but not limited to the Town of Brookhaven, the New York State Department of Transportation (NYSDOT) and the NYSDEC.

The DGEIS document will be concise but thorough, well-documented, accurate and consistent. Figures and tables will be presented in support of the discussions and analyses contained in the document. Where appropriate, technical information will be summarized in the body of the DGEIS and attached in separate appendices.

BRIEF DESCRIPTION OF THE PROPOSED ACTION

The Village of Mastic Beach (formerly a hamlet within the Town of Brookhaven) was formally incorporated in November 2010. At that time and as an interim measure, the existing zoning in place under the Town's zoning code remained in effect until a new zoning code could be established by the Village Board. The proposed zoning code for the Village was drafted by the Village Zoning Commission, and has been subject to multiple public sessions open for input on the proposed code. The Village Zoning Commission issued the final proposed zoning code in January 2013 to be considered by the Village Board of Trustees for adoption.

The existing Village zoning consists of the nine (9) Town zoning districts that were represented within the Village when the Village was established, as follows:

- A-1 Residential (40,000 SF minimum lot size)
- A-2 Residential (80,000 SF minimum lot size)
- A-5 Residential (200,000 SF minimum lot size)
- A-10 Residential (40,000 SF minimum lot size)
- J Neighborhood Business (15,000 SF minimum lot size)
- J-2 General Business (4,000 SF minimum lot size)
- J-5 Gasoline Filling Station (20,000 SF minimum lot size)
- J-6 Highway Limited Business District (no minimum lot size)
- PRC Planned Retirement Community (minimum 10 acres)

Under the proposed zoning code, eight (8) Village zoning districts and one floating district are proposed, as follows:

- R-1 Residence District (7,500 SF minimum lot size)
- R-2 Residence District (80,000 SF minimum lot size)
- RH Retirement Housing District (minimum 8 acres)
- R/B Residence/Business District (10,000 SF minimum lot size)
- B-1 Business District (10,000 SF minimum lot size)
- B-2 Business District (20,000 SF minimum lot size)

- I Industrial District (20,000 SF minimum lot size)
- WD Waterfront District (10,000 SF minimum lot size)
- X Business District (Floating District - 20,000 SF minimum lot size)

Under the current code, the majority of the lots in the Village do not conform to their respective zoning district requirements. The proposed zoning code was developed to better reflect the existing land use, density and dimensional characteristics of parcels within the Village, as well as to encourage orderly development consistent with the vision of the Village. It is noted that no specific development proposal is considered by the proposed action; rather, the proposed action is limited to the establishment of a new zoning code for the Village.

A comparison of the Village's existing and proposed zoning codes reveals that there are changes in the type and amount of development that could occur on the remaining developable lots in the Village under these two codes. Consequently, there would be differences in the impacts that would occur from such development scenarios; it is these impacts that warrant analysis in the context of the required GEIS.

Tables 1 and 2 below summarize and compare the dimensional regulations of the existing and proposed districts. **Table 3** summarizes how the existing parcels are proposed to be rezoned by total parcel count, and **Table 4** summarizes the proposed zoning changes in terms of total acreage impacted.

Table 3 indicates that there are 7,579 discrete properties in the Village, all of which will be subject to rezoning by the proposed action. The table indicates that there are a total of 37 distinct rezoning actions to be undertaken by the proposed action (e.g., 20 parcels totaling 3.84 acres from A-1 to B-1, one parcel of 0.60 acres from A-1 to B-2, etc.). However, as the majority of the Village is already developed and therefore unlikely to be redeveloped in the immediate future, it is not expected that the proposed action will result in immediate or widespread construction upon adoption.

PROJECT APPROVALS AND SEQRA PROCESS

The DGEIS will be the subject of a public comment period of at least 30 days and a public hearing. The period for written comments will extend 10 days after the close of the DGEIS hearing. Comments will be reviewed and addressed in a FGEIS; this document will list all substantial comments and will provide a response. Once the FGEIS is accepted by the Village Board, a 10 day consideration will be provided, after which the Village Board will adopt a Statement of Findings and a decision on the project. No other agencies are directly involved with approval of the new Village zoning; however, a number of agencies would be involved in review of actions which may result from the Village zoning through future site plan and subdivision review.

Table 1
DIMENSIONAL REGULATIONS, Existing Zoning

Zone	Building Height	Minimum Lot Area (SF)	Minimum Lot Width (feet)	Front Yard Setback (feet)	Minimum Side Yard (feet)	Minimum Total Side Yard (feet)	Minimum Rear Yard (feet)	Building Area (% of lot)
A-1	35 feet, 2.5 stories	40,000	150	50	25	75	60	15%
A-10	35 feet, 2.5 stories	400,000	400	80	40	90	85	3%
A-2	35 feet, 2.5 stories	80,000	200	60	30	80	75	15%
A-5	35 feet, 2.5 stories	200,000	300	70	35	85	80	6%
J	35 feet, 2.5 stories	15,000	100	40	10	N/A	40	FAR of 20%
J-2	50 feet, 3 stories	4,000	40	15	N/A	N/A	20	50%
J-5	1 story	20,000	150	50	50	N/A	50	25%
J-6	30 feet, 2 stories	N/A	100	40	12	N/A	35	30%
PRC	35 feet, 2.5 stories	10 acres	N/A	30	30	N/A	30	20%

Table 2
DIMENSIONAL REGULATIONS, Proposed Action

Zone	Building Height	Minimum Lot Area (SF)	Minimum Lot Width (feet)	Front Yard Setback (feet)	Minimum Side Yard (feet)	Minimum Total Side Yard (feet)	Minimum Rear Yard (feet)	Building Area (% of lot)
R-1	30 feet, stories[1]	7,500	75	30[2]	15	30	25	35%
R-2	35 feet, 2 stories[3]	80,000	150	60[4]	30	80	75	15%
RH	35 feet, 2.5 stories[7]	348,480 (8 acres)	200	25[5]	50[6]	N/A	N/A	FAR of 30%, density of 4 units/acre
R/B	30 feet, 2 stories[1]	10,000	100	30[2]	15	30	25	35%
B-1	35 feet, 2.5 stories[3]	10,000	80	5[8]	N/A	N/A	15	75%
B-2	35 feet, 2.5 stories[3]	20,000	100	25[2]	N/A	N/A	30	35%
X	35 feet, 2.5 stories[3]	20,000	100	25	N/A	N/A	25	35%
I	35 feet, 2.5 stories	20,000	100	30	25	N/A	30	35%
WD	35 feet, 2 stories[3]	10,000	80	30	20	10	25	40%

1 Except in a Flood Damage Prevention Zone, in which case the maximum height shall not exceed 35 feet.

2 Except for existing permitted structures on the same side of a street, where 40% of the street between the two nearest intersections has at least 2 structures, the average front yard setback for the existing structures is used. A maximum setback of 40 feet is permitted.

3 Except in a Flood Damage Prevention Zone, in which case the maximum height shall not exceed 40 feet.

4 Except for existing permitted structures on the same side of a street, where 40% of the street between the two nearest intersections has at least 2 structures, the average front yard setback for the existing structures is used. A maximum setback of 60 feet is permitted.

5 Planning Board may approve up to 75 feet for front yard setback.

6 Planning Board may approve a reduction in side yard to 25 feet based on nature and character of development within 500 feet of the parcel.

7 Planning Board may approve a maximum height of 50 feet and/or 3 stories, whichever is less.

8 Except for existing permitted structures on the same side of a street, where 40% of the street between the two nearest intersections has at least 2 structures, the average front yard setback for the existing structures is used. A maximum setback of 10 feet is permitted.

Table 3
ANTICIPATED CHANGES OF ZONE
Number of Parcels Affected

Existing Zoning	Proposed Zoning									
	B-1	B-2	I	R/B	R-1	R-2	RH	WD	Water*	Totals
A-1	20	1		238	6,687	25		24		**6,995**
A-1/J-2	14			5	4			1		**24**
A-10					1					**1**
A-2					192	76		20		**288**
A-2/A-1						1				**1**
A-5					5					**5**
J	46				31					**77**
J-2	122	2	2	9	9	4		4		**152**
J-2/A-1	11	1		1	1					**14**
J-2/J-4				1						**1**
J-5		1								**1**
J-6	4									**4**
PRC							6			**6**
ROW						3	1			**4**
Water*					1				5	**6**
Totals	**217**	**5**	**2**	**254**	**6,931**	**109**	**7**	**49**	**5**	**7,579**

* The large majority of water surfaces of the Village are not zoned.

Table 4
ANTICIPATED CHANGES OF ZONE
Acreages Affected

Existing Zoning	Proposed Zoning									
	B-1	B-2	I	R/B	R-1	R-2	RH	WD	Water*	Totals
A-1	3.84	0.60		88.53	1,593.42	33.61		4.89		**1,724.91**
A-1/J-2	3.74			1.20	0.97			0.61		**6.52**
A-10					0.18					**0.18**
A-2					40.88	205.15		3.09		**249.12**
A-2/A-1						20.03				**20.03**
A-5					2.12					**2.12**
J	8.07				5.13					**13.19**
J-2	18.57	3.79	0.40	1.63	3.69	1.21		4.37		**33.66**
J-2/A-1	3.47	1.37		0.41	0.23					**5.47**
J-2/J-4				0.49						**0.49**
J-5		0.24								**0.24**
J-6	0.95									**0.95**
PRC							12.62			**12.62**
ROW						4.04	2.24			**6.29**
Water*					1.24				346.36	**347.61**
Totals	**38.64**	**6.00**	**0.40**	**92.26**	**1,647.85**	**262.78**	**14.86**	**12.95**	**346.36**	**2,423.39**

* The large majority of water surfaces of the Village are not zoned.

POTENTIALLY SIGNIFICANT ADVERSE IMPACTS

As noted above, there are changes in the type and amount of development that could occur on the developable properties in the Village under the existing and the proposed zoning codes. Thus, there would be differences in the impacts in the Village associated with these two scenarios. It is the purpose of the DGEIS to discern and evaluate these differences in impacts. As noted, the proposed action is limited to the adoption of a Village of Mastic Beach Zoning Code, with no site-specific development applications involved; it is this distinction that justifies the preparation of a Generic EIS. As a result, the impact discussions will be conducted at a generic level of detail.

The following presents the potential significant adverse impacts that were listed in the Positive Declaration for the proposed action and will be addressed in the DGEIS:

a. Change in surface grade and soil profile of any site on which development is proposed.
b. Soil impacts associated with erosion occurring during construction and/or grading activities.
c. Changes in the quantity and/or quality of stormwater recharged.
d. Changes in the quantity and/or quality of groundwater beneath the Village.
e. Potential impacts to the volume and/or pattern of stormwater runoff.
f. Change in the ecological character of the Village, and impact on flora and fauna from development, including potential impacts to freshwater and tidal wetlands.
g. Changes to the pattern of land uses and zoning types in the Village, based on an evaluation of the maximum potential change in use and density.
h. Conformance with Village comprehensive planning goals.
i. Impacts to Village character, as expressed in its aesthetics, land use pattern and noise levels.
j. Impacts on the use and availability of the community services and utilities serving the area.
k. Change in tax revenue under a full build-out scenario from the proposed zoning.
l. Potential changes in population and the potential number of school-aged children.
m. The proposed action may result in new retail and/or commercial spaces, which would create new employment opportunities.
n. Impacts on local roadways and intersections due to any changes in the vehicle trip characteristics of the subject site.
o. The potential for impacts to pre-historic and/or historic-era cultural resources, whether known or undiscovered, should be evaluated.

FORMAT AND CONTENTS OF THE DGEIS

The DGEIS will conform to the basic content requirements as contained in 6NYCRR Part 617.9(b)(3). The document will include the following:

Cover Sheet

The cover sheet to the document will include the following information:

- Statement identifying the document as a DGEIS
- Date that the DGEIS was submitted to the lead agency

- Name of the proposed action, and the boundaries of the area within which the proposed action will occur
- The Village Board will be identified as the lead agency for the proposed action, and the name, title, and telephone number of the lead agency contact person will be provided
- The name and address of the project sponsor will be provided, with the name, title, and telephone number of the contact person representing the project sponsor
- The name and address of the primary preparer of the DGEIS will be provided, with the name(s), titles(s), and telephone number(s) of the contact person(s).
- The date of acceptance of the DGEIS (to be inserted later) will be provided
- The date of the deadline by which written comments on the DGEIS are due to the lead agency (to be inserted later)
- A listing of all involved and interested agencies; Village, Town, County and State officials; consultants; and civic organizations to whom copies of the DGEIS and supporting materials will be distributed

Table of Contents

A table of contents will provide all section headings, page numbering, list of figures, list of tables, list of appendix items and any additional volumes, if any.

Summary

The summary will include the following:

- A brief description of the proposed action
- A listing of the anticipated significant adverse and beneficial impacts of the proposed action
- A listing of those measures of the proposed action that will mitigate the anticipated significant adverse impacts noted above
- A listing of the alternatives to the proposed action that are addressed in the document
- A listing of matters to be decided (*permits, approvals, funding, etc., from other agencies*)

Text

The text portion of the DGEIS will contain the following sections, and will address the issues presented herein:

1.0 DESCRIPTION OF THE PROPOSED ACTION

1.1 Background, Need, Objectives and Benefits of the Proposed Action

1.1.1 Project Background *(Provide brief history of the Village's foundation and the factors leading to its creation, and of the efforts taken to establish a zoning code specific to the Village of Mastic Beach.)*

1.1.2 Public Need and Village Objectives *(Justify proposed action in terms of Village goals.)*

1.1.3 Benefits of the Proposed Action *(Provide discussion of the anticipated benefits to the Village arising from the new zoning code.)*

1.2 Location of the Proposed Action *(Using appropriate mapping, describe location of the Village and its existing zoning districts.)*

1.3 Discussion of the Proposed Action *(Provide a detailed discussion of the proposed zoning code and how it will achieve the goals of the Village; provide a description of the various zoning districts ones proposed to be enacted; provide a description of the use dimensional use requires posed to provide a map showing the proposed new district*

boundaries, and a tabulation of the amounts of development potential for both the existing and proposed zoning codes.)

1.4 Build Out Analysis of Existing and Proposed Zoning *(Identify changes in the potential development under existing and proposed zoning; perform analysis to determine what sites will experience a change in use potential based on proposed zoning; this analysis will include identification of "hard sites" or sites where the use/development potential will not change, and "soft sites" or sites where there is an increase or decrease in development potential; identify sites that are constrained by other factors and regulations such as wetlands, sanitary density limits, etc.; identify subdivision potential based on existing and proposed zoning; prepare a Build Out analysis based on existing and proposed zoning and quantify development potential and difference between existing/proposed zoning; prepare summary table of characteristics of proposed Build out under existing/proposed zoning.)*

1.5 Permits and Approvals Required *(Provide a brief discussion of the required permits, reviews and approvals for the potential development, with the corresponding reviewing/issuing agencies.)*

2.0 NATURAL ENVIRONMENTAL RESOURCES

2.1 Topography

2.1.1 Existing Conditions *(Using narrative, mapping and/or tables, describe current topographic character of Village; indicate high and low points, identify slopes, etc.)*

2.1.2 Anticipated Impacts *(Describe & discuss the differences in impact of development of the remaining developable sites in the Village under existing zoning and under the proposed action. Discuss potential changes in topography due to grading associated with development; describe applicable erosion control measures and review procedures.)*

2.1.3 Proposed Mitigation

2.2 Surface and Subsurface Soils

2.2.1 Existing Conditions *(Using narrative, mapping and/or tables, describe surface soils found based on the Suffolk County Soil Survey; discuss characteristics and limitations/constraints of each soil present.)*

2.2.2 Anticipated Impacts *(Describe & discuss the differences in impact of development of the remaining developable sites in the Village under existing zoning and under the proposed action. Discuss the potential for surface and subsurface soil impacts from development; discuss impacts on development due to soil constraints.)*

2.2.3 Proposed Mitigation

2.3 Groundwater and Surface Water

2.3.1 Existing Conditions *(Using narrative, mapping, tables and quantitative methods where available, describe groundwater and surface water resources; characterize their conditions, indicate applicable regulations & jurisdiction; provide groundwater elevation, local minimum & maximum depths to water table, flow direction, etc. Provide overview of groundwater quality and relevant considerations with respect to land use. Describe stormwater runoff conditions and handling systems.)*

2.3.2 Anticipated Impacts *(Describe & discuss the differences in impact of development of the remaining developable sites in the Village under existing zoning and under the proposed action. Using qualitative methods, discuss potential for impact to groundwater and surface water resources and applicable*

regulations regarding allowed density of development; discuss proposed drainage system and changes to site recharge volume and best management practice for stormwater; as well as potential stormwater impacts.)

2.3.3 Proposed Mitigation

2.4 Vegetation and Wildlife

2.4.1 Existing Conditions *(Using narrative, mapping and/or tables, describe the habitats present in the Village, and the vegetation and wildlife species found or expected; contact NY Natural Heritage Program information; identify designated wetland areas; describe regulations related to use in proximity to wetlands.)*

2.4.2 Anticipated Impacts *(Describe & discuss the differences in impact of development of the remaining developable sites in the Village under existing zoning and under the proposed action. Discuss changes in acreages of habitats in Village from development anticipated; discuss the changes in wildlife use/occupancy; discuss potential impact on wetlands, changes in the regulations pertaining to use in proximity to wetlands and mechanisms to ensure protection of wetlands.)*

2.4.3 Proposed Mitigation

3.0 HUMAN ENVIRONMENTAL RESOURCES

3.1 Land Use, Zoning and Plans

3.1.1 Existing Conditions *(Using narrative, mapping and/or tables, describe current land use and zoning patterns of Village; discuss existing zoning and permitted uses; provide map of existing developable sites in Village and corresponding development potential under existing zoning; discuss Village comprehensive planning and any other relevant plans.)*

3.1.2 Anticipated Impacts *(Describe & discuss the differences in impact of development of the remaining developable sites in the Village under existing zoning and under the proposed action. Discuss effect of proposed action on land use and zoning patterns of Village; provide table of potential development under proposed zoning; discuss conformance to Village comprehensive planning efforts and appropriate land use plans.)*

3.1.3 Proposed Mitigation

3.2 Community Character

3.2.1 Existing Conditions *(Using appropriate methods, depict and describe the visual character of the Village. Describe the existing noise conditions; identify notable sources and presence/distances to sensitive receptors. Note and discuss applicable noise ordinances.)*

3.2.2 Anticipated Impacts *(Describe & discuss the differences in impact of development of the remaining developable sites in the Village under existing zoning and under the proposed action. Describe potential impacts in terms of changes in visual character from differing building uses, massing, etc.; changes of noise receptor locations & distances.)*

3.2.3 Proposed Mitigation

3.3 Community Services

3.3.1 Existing Conditions *(Describe and discuss the various utility and community services available in the Village.)*

3.3.2 Anticipated Impacts (*Describe & discuss the differences in impact of development of the remaining developable sites in the Village under existing zoning and under the proposed action; assess if services are capable of providing*

coverage based on change in potential land use; discuss taxation as a source of revenue to offset demand for community services.)

3.3.3 Proposed Mitigation

3.4 Demography

3.4.1 Existing Conditions *(Based on the most recent US Census, briefly describe and discuss the total population and age distribution of Village residents; provide overview of Village employment and work-type distribution, if available.)*

3.4.2 Anticipated Impacts (*Describe & discuss the differences in impact of development of the remaining developable sites in the Village under existing zoning and under the proposed action. Provide estimates of anticipated changes in population and age distribution due to development of the developable sites; discuss changes in employment and distribution of work-type.)*

3.4.3 Proposed Mitigation

3.5 Traffic

3.5.1 Existing Conditions *(Describe and discuss current roadway conditions and traffic flow/intersection conditions.)*

3.5.2 Anticipated Impacts (*Describe & discuss the differences in impact of development of the remaining developable sites in the Village under existing zoning and under the proposed action. Provide estimates of trip generation from development of developable sites; discuss anticipated impacts to roadways. Discuss potential need for improvements, key locations and thresholds for implementation.)*

3.5.3 Proposed Mitigation

3.6 Cultural Resources

3.6.1 Existing Conditions *(Provide map and information on any established cultural resources within the Village. Based on review of the NYS Office of Parks, Recreation and Historic Preservation [OPRHP] Sensitivity Map, determine whether the Village is located in an archaeologically sensitive area for the potential presence of cultural resources; if present, consult the OPRHP for site file information.)*

3.6.2 Anticipated Impacts *(Describe & discuss the differences in impact of development of the remaining developable sites in the Village under existing zoning and under the proposed action. Describe/discuss potential impacts of development of developable sites on cultural resources that are delineated in the future. In such cases, discuss the land use controls and review procedures that would apply.)*

3.6.3 Proposed Mitigation

4.0 OTHER REQUIRED SECTIONS

4.1 Cumulative Impacts *(Provide definition of the term "cumulative impacts", and discuss the potential for such impacts from multiple and simultaneous development projects arising from the proposed action. Generally describe the types of impact that could occur, and whether & how such impacts could be controlled or mitigated.)*

4.2 Adverse Impacts That Cannot Be Avoided *(Provide brief listing of those adverse environmental impacts described/discussed previously that cannot be avoided.)*

4.3 Irreversible and Irretrievable Commitment of Resources *(Provide brief discussions of those natural and human resources that will or may be committed to and/or consumed as a result of the proposed action.)*

4.4 Growth-Inducing Aspects *(Provide brief discussion of those aspects of the proposed action that will or may trigger or contribute to future growth.)*

4.5 Effects on the Use and Conservation of Energy *(Provide a brief discussion on those aspects of the proposed action that would or could contribute to an increase in energy consumption, as well as potential options for energy conservation; identify methods for reduction of use of fossil fuels that could be instituted.)*

5.0 ALTERNATIVES

5.1 No Action *(Alternative in which the proposed action is not undertaken; the existing Village Zoning Code is not changed.)*

6.0 FUTURE ACTIONS

INFORMATION TO BE INCLUDED IN APPENDICES

Supporting information that assists in describing resources, services and/or impacts will be provided in the Appendix section of the document. Information that is too technical to include in the body of the report will be included as appendices. Such information may include: Build Out Analyses; demographic data, traffic assessment information and/or other related materials. Location, resource and service area maps will be included in a "figures" section of the document.

ISSUES DEEMED NOT RELEVANT, NOT ENVIRONMENTALLY SIGNIFICANT OR ADEQUATELY ADDRESSED IN A PRIOR ENVIRONMENTAL REVIEW

No other issues have been identified to date. It is the intent of the Village to thoroughly disclose and analyze potential impacts associated with the proposed action.

APPENDIX B

PHOTOGRAPHS OF VILLAGE

Taken May 10, 2013

View of residential area in western portion of Mastic Beach

View of residential area in western portion of Mastic Beach

View of residential area in southwestern portion of Mastic Beach

View of western boundary of Mastic Beach

View of western boundary of Mastic Beach

View of residential area in western portion of Mastic Beach

View of William Floyd Parkway on western boundary of Mastic Beach

View of residential area in western Mastic Beach

View of residential area in western Mastic Beach

View of residential area in western Mastic Beach

View of Commack Road in northwestern Mastic Beach

Commercial property along Commack Road in northwestern Mastic Beach

View of commercial area along Commack Road in northwest

View of residential area along Commack Road in northwest

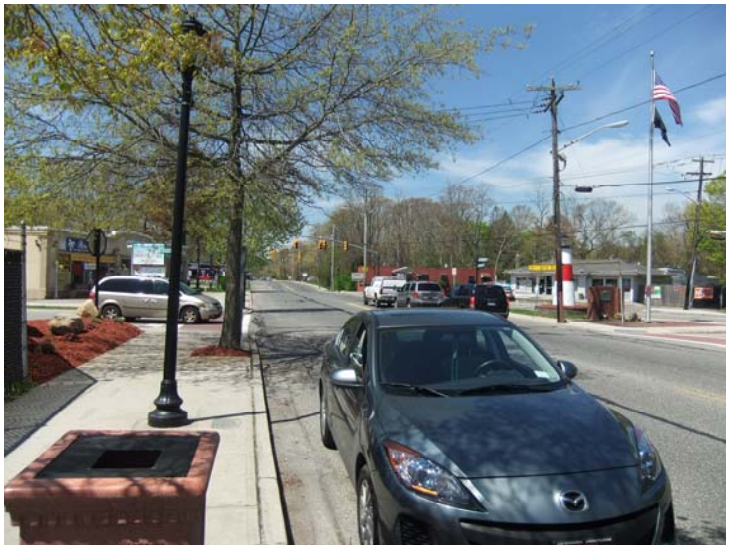
View of northwestern Village boundary

View of residential area in northwestern Mastic Beach

View of commercial area along Commack Road in northwest

View of main commercial area along Neighborhood Road

View of main commercial area along Neighborhood Road



View of main commercial area along Neighborhood Road

View of main commercial area in central area of Mastic Beach

View of central Mastic Beach on Neighborhood Road

View of central Mastic Beach on Neighborhood Road

View of central Mastic Beach on Neighborhood Road

View of residential area in central Mastic Beach

View of residential area south of Neighborhood Road

View of southern Mastic Beach

View of southern Mastic Beach

View of southern Mastic Beach

View of southeastern Mastic Beach

View of southeastern Mastic Beach

View of northern Mastic Beach

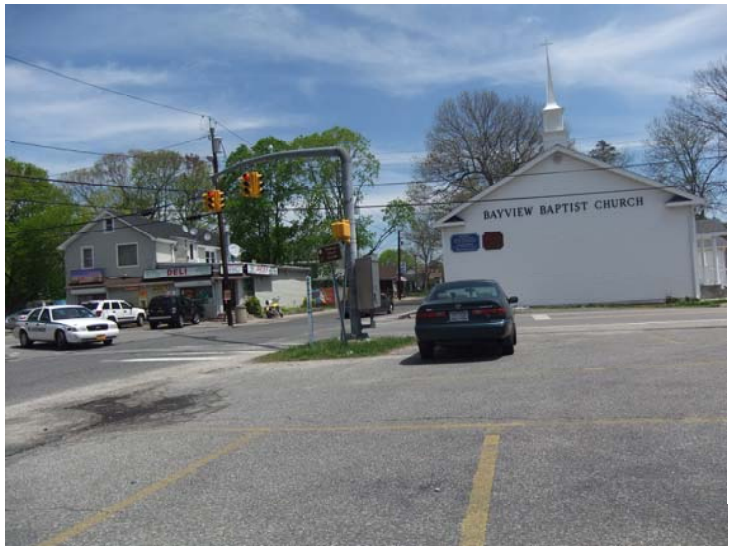
View of northern Mastic Beach

View of park in northern Mastic Beach

View of residential area in north Mastic Beach

View of residential area in northeastern Mastic Beach

View of commercial area in northern Mastic Beach



View of commercial area in northern Mastic Beach

APPENDIX C

DELINEATION OF THE SOFT SITES AND DERIVATION OF THE POTENTIAL YIELD CALCULATIONS

Mastic Beach Built-Out Analysis Methodology

The Village Mastic Beach consists of 7,579 parcels of land, many of which are already developed. The proposed zoning code for the most part reflects the existing uses on the developed parcels. For these parcels, the proposed zoning retains the "status quo." For the purpose of SEQRA, analysis of the implications of the proposed zoning code and zoning map have been analyzed by determining parcels within the Village where the new zoning would result in a change in development potential, called a "reasonable worst case development scenario." This reasonable worst case development scenario was compared to the potential full development scenario which could occur under present zoning. To accomplish this, it was appropriate to identify properties where development or redevelopment which varies from the current pattern of development could occur; for the purpose of this analysis, the term "soft sites," is used to describe properties that are more likely to be redeveloped. Parcels that are already developed for which the proposed zoning either reflects the current use, or would not change the potential for development are considered "hard sites."

This document outlines the methodology used to compare the existing and future potential build-out condition for those sites where changes may be anticipated under the proposed zoning code as well as the identified changes on the proposed zoning map for the Village of Mastic Beach.

The identification of "soft sites" provides a basis for analysis of development potential under the new code provisions, and is considered to be "conservative" in that many of these sites may never be redeveloped or will slowly be redeveloped over time. Comparisons can then be made between existing conditions, conditions under existing zoning and conditions under proposed zoning. These analyses allow for "findings" with respect to the potential additional development (or lack of) that would be facilitated by the code change. These findings form the basis for assessment of the magnitude of impacts thereby allowing a "hard look" to be taken at the code changes in conformance with State Environmental Quality Review Act (SEQRA) assessment methods.

An important consideration in the analysis is that the Village zoning only determines what parcels of land can potentially be used for and establishes the dimensional requirements for that use. There are other regulations that apply and may restrict the density of use which may occur on a given parcel of land. Examples include Article 6 of the Suffolk County Sanitary Code (SCSC) which limits discharge of sanitary waste in Mastic Beach to less than 300 gallons per day per acre (gpd/acre) or the equivalent of a 40,000 square foot (SF) residential lot yield. Parcels that are less than 40,000 SF and were singly and separately owned in 1980 when Article 6 was enacted are entitled to a sanitary flow of 300 gpd. Parcels that were developed prior to Article 6 are able to maintain their grandfathered flow and existing use. Another such agency regulation is the New York State Environmental Conservation Law Articles 24 and 25 which regulate freshwater and tidal wetland respectively. These laws are implemented by the New York State Department of Environmental Conservation (NYSDEC) and the regulations require setbacks for development for parcels containing or adjoining wetlands within the jurisdiction area of the NYSDEC. Parcels that dominated by or completely within a freshwater or tidal wetland area are not considered buildable as development would not comply with setback requirements and would result in a significant adverse impact to a state-designated (and locally

important) resource. These requirements would apply under either current or proposed zoning and therefore development of certain parcels is limited and/or not feasible as a result of these requirements.

The following provides the methodology for selection of the "soft sites":

1. NP&V utilized the geographic information system (GIS) tax parcel database for the Village of Mastic Beach obtained under a license agreement with the Suffolk County Department of Real Property. A total of 7,579 parcels are located within the Village boundaries.
2. A sieve analysis was performed to reduce the number of parcels to be analyzed under the build-out (these parcels are not expected to generate a different level of development than exists under the current zoning). Specifically:
    a. Parcels that are currently zoned A-1 and are proposed to be zoned R-1 under the proposed zoning map were removed as not requiring further analysis (6,687 parcels).
    b. Parcels that are currently zoned A-1/J-2 (i.e., parcels that are predominately zoned A-1) and are proposed to be zoned R-1, were removed as not requiring further analysis as the change is not significant since these split zoned parcels are already effectively zoned A-1 (4 parcels).
    c. Parcels that are currently zoned A-2 and are proposed to be zoned R-2 are removed as not requiring further analysis since the change is not significant in terms of development potential (76 parcels).
    d. A parcel that is currently zoned A-2/A-1 (the parcel that has the majority of site area within the A-2 zone) and is proposed to be zoned R-2 was removed from the analysis since this split zoned parcel is already effectively zoned A-2 (1 parcel).
    e. Parcels that are currently zoned PRC and are proposed to be zoned RH are removed from the analysis, as this represents no significant change in use potential (6 parcels).
    f. Parcels that are currently identified as right-of-way (ROW) are removed from the analysis as these parcels represent privately owned roadways (4 parcels).
    g. Parcels that are currently identified as WAT (water) are removed from the analysis as these parcels represent underwater lands (6 parcels).
    h. Parcels that are currently zoned A-1 and are proposed to be zoned R/B and are not vacant are removed from the analysis as this represents no significant change for these parcels due to Suffolk County Department of Health Services sanitary restrictions (230 parcels).
3. Of the remaining 795 parcels, vacant parcels were identified within the Village as these have the greatest potential for future development (131 parcels).
4. If not already identified as vacant (i.e., parcel is developed), parcels in the following categories were reviewed for site specific uses:

a. A-1 to B-1

b. A-1 to B-2

c. A-1 to WD

d. A-2 to WD

e. J-2 to I

f. J-2/J-4 to I

5. If the uses in the above listed categories were not consistent with the proposed zoning, the uses were identified as a "soft site." Combining the vacant parcels and the parcels with a potential change in future use, 158 soft sites were identified.

6. Of the 158 parcels, those that consisted of vegetated tidal or freshwater wetlands were removed from the parcels that needed further analysis (39 parcels) as these are not buildable in either scenario.

7. A total of 119 parcels were identified as needing further analysis.

8. Also reviewed was the possible change in residential subdivision potential, specifically:

    a. If a parcel is currently greater than 80,000 SF in size and under current A-1 zoning, 1 lot per 40,000 SF is possible (due to Article 6 sanitary restrictions); if a parcel is greater than 160,000 SF in A-2 zoning (which requires 80,000 SF per lot), the lot was identified with the potential area for a subdivision. A total of twelve lots currently zoned A-1 are greater than 80,000 SF while a total of twelve lots currently zoned A-2 are greater than 160,000 SF. Under current zoning, 49 potential lots could be created from parcels currently zoned A-1 or A-1/J-2, while 58 lots could be created from parcels currently zoned A-2. In total, there is the potential for 107 additional lots under current zoning.

    b. It is noted that five parcels identified as WAT or ROW (surface water or roadways) are greater than 80,000 SF in size, however, these are not considered subdivideable because they are roadways or underwater lands.

    c. Two parcels currently zoned PRC proposed to be zoned RH are greater than 80,000 SF in size, however, these parcels are part of the Fairfield Knolls East development which has already maximized density on this site.

    d. One parcel currently zoned J-2 proposed to be zoned B-2 is greater than 80,000 SF in size. As a result, this parcel has the potential for additional commercial area due to Article 6 Sanitary Restrictions.

    e. The above parcels with potential for subdivision under the current zoning regulations were analyzed to determine whether they could be subdivided under proposed zoning. Of the original 12 parcels zoned A-1 or A-1/J-2, only 8 could be subdivided under proposed zoning as a result in the upzoning of the parcels from A-1 or A-1/J-2 to R-2. The change in proposed zoning would result in a maximum potential of 36 lots.

f. Of the original 12 parcels zoned A-2 or A-2/A-1, all could still be subdivided under proposed zoning as the minimum lot area does not change for these lots. The proposed zoning would result in a maximum potential of 58 additional lots.

g. In summary, 13 fewer lots from subdivisions would be possible under the proposed zoning.

For the purpose of a build-out analysis it was appropriate to consider those adjacent parcels which have common owners (44 tax lots with at least two of the lots under common ownership, yielded 16 properties in the build-out analysis). Thus the build-out analysis was performed on a total of 92 properties.

A build-out analysis requires that the development potential of a given parcel be determined. The development potential is based on the various regulatory requirements that determine the use and density of development of a site. Controlling factors typically include: sanitary density, allowable coverage (or floor area), required parking and other site design parameters (landscape, walkways, amenities). As noted, some parameters such as presence wetlands may restrict building envelopes or eliminate development potential if a parcel is entirely wetlands. Other factors such as zoning setbacks are not typically controlling factors as sanitary discharge, coverage and parking requirements more typically determine density of development. Various assumptions can be applied to a given lot size to determine the development potential. The combined development of "soft sites" is referred to as the build-out analysis.

The build-out methodology utilized the following assumptions.

- The build-out assumes full build-out of all "soft sites" based upon the assumptions provided below. It is noted that there may be existing commercial uses in the Village which currently have floor area which exceeds the allowable density permissible under the proposed code. Thus the actual potential density is not represented here, but a comparison of the full build-out under existing and proposed codes. The change in possible density will allow the comparison and impact analysis required to take a "hard look" under SEQRA.
- Parking requirements are 1 space per 150 SF of floor area for commercial properties ("B-1" and "R/B" zones proposed) and 1 space per 250 SF for the one industrial site ("I" zone proposed).
- The area allotted per parking stall is assumed to be 350 SF which provides area for the stalls and aisles (but does not account for additional area required for handicapped stalls).
- Five percent of site area was included for walkways and other amenities.
- For proposed code, the maximum coverage for a parcel in the B-1 district is 75%. Based upon the required parking, the maximum floor area ratio is actually reduced to approximately 33.5%. This assumes a two story building for most of the lots, since to maximize the floor area and achieve full parking; the building would need to be 2 stories.

  For example, for a 10,000 SF lot, a 3,350 SF building is permitted, which requires 3,350/150 parking spaces (22.3, rounded to 23 spaces). The surface area required for

this parking is approximately 8,050 SF. Clearly if the building were constructed as a single story, the lot could not accommodate the area of the footprint and the required parking. However, as a 2 story building, the footprint is reduced to 1,675 SF which when combined with the footprint of the building is less than 10,000 SF and leaves a small area for amenities.

- As per the proposed code, the maximum coverage for R/B is 35% and for WD is 40%; however, as with the B-1 District, the parking requirements and minimal area for walkways and other site amenities restrict the realistic floor area ratio to 33.5%.
- The maximum size floor area supported is 10,000 SF due to the SCSC. Each property was allowed 300 gallons for design flow since no property exceeds one acre (which would allow a greater design flow). *(Applying 0.03/SF assumes a dry retail store, the largest density is assumed - 0.03 gallons/SF x 10,000 SF = 300 gallons).*
- Parcels which were split zoned under the existing zoning were analyzed individually to determine which zone would prevail. Under the Town of Brookhaven code, the more restrictive zoning district prevails unless the area of this portion is 25% or less. For example, for a 10,000 SF site that is zoned A-1/J-2, the J-2 portion of the site would need to be at least 7,500 SF in size to allow the J-2 zoning to prevail. In each case for the split zoned parcels, under the Town code, the more restrictive (residential) zoning prevailed.
- For the calculations, the property size is per the Suffolk County tax parcel database. For parcels that were combined for the purpose of build-out, a summation was performed.
- For residential lots, one home was assumed, whether or not the property met the minimum lot size requirement. This assumes that lots are recognized as single and separate, and represents a worst-case (maximum lot) scenario.

These assumptions were applied to each "soft site" tax parcel within the Village to determine the build-out under existing zoning and proposed zoning. A summary of the results of the build-out analysis is provided in **Table 1** below:

Table 1
SUMMARY OF BUILD-OUT ANALYSIS

Parameter	Value
Number of "soft sites"	92
Estimated number of residences possible under current zoning	25
Estimated number of residences possible under proposed zoning	29
Estimated area of commercial floor area possible under current zoning	175,817 SF
Estimated area of commercial floor area possible under proposed zoning	214,592 SF
Estimated area of industrial floor area possible under existing zoning	0 SF
Estimated area of industrial floor area possible under future zoning	3,526 SF

As a result, and based on the determination of "soft sites" and assumptions noted above, the impact of the proposed zoning on the build-out of the Village is summarized in **Table 2** as follows:

Table 2
SUMMARY OF CHANGE IN BUILD-OUT

Parameter	Existing Zoning	Proposed Zoning	Change
Change in Residences (dwellings)	25	29	4
Change in Commercial Floor Area (SF)	175,817	214,592	38,775
Change in Industrial Floor Area (SF)	0	3,526	3,526

APPENDIX D

ECOLOGY-RELATED MATERIALS

Appendix D-1
Coastal Habitat Assessment

Attachment B:

COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

Name of Area:	**Moriches Bay**
Designated:	**March 15, 1987**
Updated:	**December 15, 2008**
County:	**Suffolk**
Town(s):	**Brookhaven, Southampton**
7½' Quadrangle(s):	**Eastport, NY; Moriches, NY; Pattersquash Island, NY**

Assessment Criteria	**Score**

Ecosystem Rarity (ER)–the uniqueness of the plant and animal community in the area and the physical, structural, and chemical features supporting this community.

ER assessment: One of the largest, protected, shallow, coastal bays in New York State. **64**

Species Vulnerability (SV) – the degree of vulnerability throughout its range in New York State of a species residing in the ecosystem or utilizing the ecosystem for its survival. (E = Endangered, T = Threatened, SC = Special concern)

SV assessment: Roseate tern (E), least tern (T), common tern (T), osprey (SC), and black skimmer (SC) nesting and feeding areas. Additive division: 36 + 25/2 + 25/4 +16/8 + 16/16 = 57.75 **57.75**

Human Use (HU) – the conduct of significant, demonstrable, commercial, recreational, or educational wildlife-related human uses, either consumptive or non-consumptive, in the area or directly dependent upon the area.

HU Assessment: Recreational fishing, shellfishing, and waterfowl hunting in the area are significant to residents from throughout Long Island. **9**

Population Level (PL) – the concentration of a species in the area during its normal, recurring period of occurrence, regardless of the length of that period of occurrence.

PL assessment: Concentrations of wintering waterfowl are of statewide significance. **16**

Replaceability (R) – ability to replace the area, either on or off site, with an equivalent replacement for the same fish and wildlife and uses of those same fish and wildlife, for the same users of those fish and wildlife.

R assessment: Irreplaceable. **1.2**

Habitat Index: (ER + SV + HU + PL) =146.75 **Significance = (HI x R) = 176.1**

NEW YORK STATE
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT
NARRATIVE

MORICHES BAY

LOCATION AND DESCRIPTION OF HABITAT:

Moriches Bay is located along the south shore of Long Island, between Great South Bay and Shinnecock Bay, in the Towns of Brookhaven and Southampton, Suffolk County (7.5' Quadrangles: Pattersquash Island, N.Y.; Moriches, N.Y.; and Eastport, N.Y.). This approximate 10,090 acre area is generally defined by the mean high water elevation on the west, north, and east sides and by the bayside edge of the salt marshes along the south shore. The fish and wildlife habitat of this area includes all of Moriches Bay, Moneyboque Bay, and Narrow Bay (to the Smith Point Bridge), the wetlands along Fire Island National Seashore at Floyd Point between Lawrence Creek and Home Creek, the Terrell River and the bordering wetlands (up to the Montauk Highway), and the tidal wetland portions of the William Floyd Estate. This estate, owned by the National Park Service, is one of the few remaining examples of tidal wetlands which are contiguous with an upland buffer. The entire Moriches Bay is bordered by high density residential development and small craft harbor facilities on the west, north and east sides. The barrier beaches to the south are generally undeveloped. Moriches Bay is connected to Shinnecock Bay to the east via the Quogue Canal, and to Great South Bay via Narrow Bay. Moriches Inlet, which connects Moriches Bay to the Atlantic Ocean, was formed by a breach through the barrier beach in 1931 and was stabilized by stone jetties between 1947 and 1954.

The entire bay area contains extensive areas of open water, undeveloped salt marshes, mud flats, and dredged material islands, with approximately 50% of the bay composed of marshes and shoals. Nine mainland marsh sites have been identified in the Atlantic Coast Joint Venture of the North American Waterfowl Management Plan as priority sites for acquisition or restoration. Sparsely vegetated communities of maritime beach line the shores of Moriches Bay. Maritime beach occurs on unstable sand, gravel, or cobble ocean shores above mean high tide, where the shore is modified by storm waves and wind erosion. The maritime beach is dominated by beach grass (*Ammophila breviligulata*). This community is an important nesting ground for numerous beach nesting shore birds.

Moriches Bay is the shallowest of the three south shore bays with inlets. Water depths throughout the bay are generally less than 6 feet below mean low water. Submerged aquatic vegetation beds are present in Moriches Bay, found in shallow quiet waters below the spring low tide level. Water inputs into the bay include numerous small, freshwater, coastal streams of groundwater origin, the Terrell and Forge Rivers, and ocean water. Tidal fluctuations in Moriches Bay average approximately 0.55 to 2.8 feet, with the highest fluctuations occurring in Moriches Inlet. The Moriches inlet is affected by substantial littoral drift, much of which is deposited in a sand shoal in the bay. Sediments in the bay are composed primarily of sand and gravel from glacial outwash and marine sources.

FISH AND WILDLIFE VALUES:

Moriches Bay is one of the major protected, shallow, coastal bay areas on the south shore of Long Island, and constitutes one of the largest estuarine ecosystems in New York State. Moriches Bay is a regionally significant habitat for fish and shellfish, migrating and wintering waterfowl, colonial nesting waterbirds, beach-nesting birds, migratory shorebirds, raptors, and rare plants. This highly productive bay supports a variety of fish and wildlife species throughout the year. In a survey conducted in 1997, 105 species of special emphasis were identified in the Moriches Bay complex, including 42 species of fish and 41 species of birds. Many species of migratory birds nest among the salt marshes and dredged material islands in Moriches Bay. In recent years, roseate tern (E), least tern (T), common tern (T), and black skimmers (SC) have nested among these many islands, including: Carters Island, New Made Island, West and East Inlet Islands (near Moriches Inlet), Pattersquash Island, Swan Island, and an unnamed island (No Name Island) located approximately three-quarters of a mile northeast of New Made Island. Average annual breeding pair concentrations for the years from 1993-2005 for the aforementioned species were: 1,135 pairs of common tern (T) (4,055 in peak year), 204 pairs of least tern (T) (563 in peak year), 14 pairs of roseate tern (E) (36 in peak year), and 29 pairs of black skimmer (SC) (195 in peak year). Carters Island supported the largest number of least terns on Long Island in 1995 (516 pairs). Terns nest in large colonies located in sand, gravel, shells, and seaweed above the high tide mark. Black skimmer (SC) typically nest in association with tern colonies.

The barrier beaches bordering the bay serve as hunting grounds for migrating and wintering raptors, including northern harrier (T), peregrine falcon (E), osprey (SC), and short-eared owl (E). Moriches Bay has supported an average of at least 1 breeding pair of osprey (SC) for the six year period from 1998-2003. The habitat also serves as breeding grounds for Cooper's hawk (SC) and red-tailed hawk.

Other bird species nesting in the area include American black duck, mallard, gadwall, American oystercatcher, snowy egret, great egret, glossy ibis, great black-backed gull, laughing gull, herring gull, willet, clapper rail, fish crow, sharp-tailed sparrow, seaside sparrow, piping plover (E, T-fed), Cooper's hawk (SC), red-tailed hawk, and osprey (SC). The William Floyd Estate provides habitat for breeding American woodcock, a variety of migrating and nesting songbirds, and the rare plant, small graceful sedge (*Carex venusta var. minor*). Potential additional species that are critically imperiled, imperiled, or rare in New York state, according to the New York State Natural Heritage Program, and nesting in or near the area may include black crowned night heron, little blue heron, boat-tailed grackle, northern harrier (T), yellow crowned night heron, and tricolored heron. The salt marshes are used extensively as feeding areas by birds nesting in the area, and by a variety of herons, egrets, and other shorebirds.

Moriches Bay is one of the most important waterfowl wintering areas (November - March) on Long Island. Mid-winter surveys of waterfowl abundance for the ten year period from 1975-1984 indicated annual average concentration of approximately 5,000 birds observed in the bay with large populations of red-breasted mergansers and mallards. Mid-winter aerial surveys of waterfowl abundance for the thirteen year period from 1986-1998 (excluding 1997) indicate average concentrations of over 3,300 birds in the bay each year (8,039 in peak year). Concentrations of diving ducks include approximately 733 greater and/or lesser scaup (2,900 in peak year), 209 canvasback (375 in peak year), 196 common and/or hooded and/or red-breasted merganser (670 in peak year), along with lesser numbers of common goldeneye and bufflehead. Diving ducks are distributed throughout Moriches Bay, and are concentrated in the bay between Forge Point and Tuthill Point, Tuthill Cove, Hart Cove, Seatuck Cove, and the area behind Cupsogue and Westhampton Beach extending out into the bay. Concentrations of dabbling ducks during

the same time period include 1,249 American black duck (3,163 in peak year) along with lesser numbers of mallard. These dabbling ducks are more evenly distributed in small numbers along the north shore of the bay and along the back side of Cupsogue Beach and Smith Point County Park. The surveys also reported an annual average of 413 Canada goose (896 in peak year). Based on these surveys, Moriches Bay supports wintering waterfowl concentrations of statewide significance. Waterfowl use of the bay during winter is influenced in part by the extent of ice cover each year. Concentrations of waterfowl also occur in the area during spring and fall migrations (March - April and October - November, respectively). The Moriches Bay fish and wildlife habitat provides waterfowl hunting of significance primarily to Suffolk County residents. In the portions of the habitat owned by the Town of Southampton a guide is provided and required for any hunting activities.

In addition to having significant waterfowl concentrations, Moriches Bay is a productive area for marine finfish, mollusks, crustaceans, and other wildlife. Much of this productivity is directly attributable to the salt marshes and tidal flats which border the bay. Moriches Bay serves as a nursery and feeding area (April - November, generally) for bluefish, winter flounder, summer flounder, American shad, tomcod, American eel, striped bass, weakfish, American sandlance (the primary food source of the endangered roseate tern), blue crab, and forage fish species, such as Atlantic silverside, striped killifish, pipefish, and sticklebacks. A total of 55 fish species were collected during an intensive survey of the bay in 1981. Juvenile reptiles that utilize the bay, principally its sandy dune swales and mudflats, as foraging and nesting grounds include loggerhead sea turtles (T), Atlantic ridleys (E), and northern diamondback terrapins (SC). Marine mammals, including harbor seals and gray seals, use the bay in the winter, especially at a regular haulout site on Cupsogue Beach. In nearshore waters, minke whales occur throughout the year, and bottlenosed dolphin occur inshore during the summer and fall.

Moriches Inlet is an especially significant component of the bay, as a corridor for fish migrations, as a seal haulout zone, as a source for the exchange and circulation of bay waters, and as an area where feeding by many fish and wildlife species is concentrated. As a result of the abundant fisheries resources in the bay, especially winter flounder, fluke, and baitfish species, Moriches Bay receives heavy recreational and commercial fishing pressure, of regional significance. Moriches Bay is inhabited by hard clams, bay scallops, and bank mussels. Most of the bay waters are certified for commercial shellfishing with approximately 2,340 acres of permanently and 760 acres of seasonally closed waters. Landings data from the New York State Department of Environmental Conservation indicate an annual average harvest of 38,605 hard clam, 454 soft clam, 188 oyster, 24,437 mussel, 464 conch, 5,846 bay scallop, and 2,447 razor clam bushels for the 11 year period from 1993 to 2003. Moreover, harvest numbers reported for 1996-2000 for mussels and razor clams in Moriches Bay account for 49% and 16%, respectively, of average landings for the south shore of Long Island. Additionally, shellfishing is restricted to town residents in town owned waters.

Moriches Bay encompasses 1,903 acres of submerged rooted aquatic vegetation beds, accounting for approximately 21% of the entire habitat area. These beds are dominated primarily by eelgrass (*Zostera marina*) with some wigeon grass (*Ruppia maritima*). Submerged aquatic vegetation beds provide spawning and foraging habitat for an array of mollusks, crustaceans, juvenile fish, as well as diving ducks. The distribution and abundance of benthic species in the bay's eelgrass community is likely controlled by a number of factors that include eelgrass stem density, water temperature and salinity, sediment type, predation, food supply, and human harvest.

IMPACT ASSESSMENT:

Any activity that would degrade water quality, increase turbidity, increase sedimentation, or alter flows, temperature, or water depths would affect the biological productivity of this area. All species would be adversely affected by water pollution, such as chemical contamination (including food chain effects resulting from bioaccumulation), oil spills, excessive turbidity or sediment loading, non-point source run-off, waste disposal (including vessel wastes), and stormwater runoff. It is essential that high water quality be maintained in the bay to protect the shellfishery. Efforts should be made to improve water quality in the bay, including the reduction or elimination of discharges from vessels and upland sources, effective oil and toxic chemical spill prevention and control programs, upgrading of wastewater treatment plants, enactment of pet waste ordinances to reduce coliform contributions to the bay, and the implementation of erosion control and stormwater pollution prevention best management practices. Vegetated upland buffer zones (e.g. wetlands, dunes, and forested areas) should be protected or established to reduce non-point source pollution and sedimentation from upland sources.

Alteration of tidal patterns in Moriches Bay, by modification of inlet configurations or other means (e.g., sediment removal by dredging, channelization, bulkheading), would have negative impacts on the biotic communities present. No new navigation channels should be excavated within the area. Dredging to maintain existing boat channels in the bay should be scheduled in between September 15 and December 15 to minimize adverse effects on aquatic organisms. Elimination or degradation of salt marsh and intertidal areas, through excavation or filling, would result in a direct loss of valuable habitat area. Unregulated dredged material placement in this area would be detrimental to the habitat, but such activities may be designed to maintain or improve the habitat for certain species of wildlife.

Construction of shoreline structures, such as docks, piers, bulkheads, or revetments, in areas not previously disturbed by development (e.g., natural salt marsh, tidal flats, or shallows), would result in the loss of productive areas which support the fish and wildlife resources of Moriches Bay. Restoration of previously connected portions of the habitat, including the removal of structures (e.g. bulkheads, groins, jetties) which disrupt natural sedimentation and deposition patterns and physically alter the habitat may be beneficial. Construction of new, and maintenance of existing erosion control structures which interfere with natural coastal processes should be carefully evaluated for need and where possible, non-structural solutions should be utilized.

Unrestricted use of motorized vessels (including personal watercraft) in shallow waters can have adverse effects on the benthic community, and on fish and wildlife populations. Use of motorized vessels should be controlled (e.g., no wake zones, speed zones, zones of exclusion) in and adjacent to shallow waters and adjacent wetlands.

Thermal discharges, depending on time of year, may have variable effects on use of the area by marine species, such as sea turtles and overwintering waterfowl. Installation and operation of water intakes could have significant impact on juvenile (and adult, in some cases) fish concentrations, through impairment or entrainment. Activities that would enhance migratory, spawning, or nursery fish habitat, particularly where an area is essential to a species' life cycle or helps to restore a historic species population would be beneficial. Where appropriate, hydrological modifications (e.g. dams, dikes, channelization, bulkheading, sedimentation, etc.) should be mitigated or removed, including the rejoining of formerly connected tributaries, and the removal of obstructions or improvements to fish passage.

Nesting shorebirds inhabiting the barrier beaches of Long Island are highly vulnerable to disturbance by humans from April 15 through August 15. Significant pedestrian traffic or recreational use (e.g., boat and personal watercraft landing, off-road vehicle use, picnicking) of the barrier beaches and dunes could easily eliminate the use of this site as a breeding area and should be minimized during this period. Predation of chicks and destruction of eggs or nests by unleashed pets (e.g., dogs, cats) and natural predators may also occur, and predator control should be implemented where feasible. Fencing and/or annual posting of the bird nesting area should be provided to help protect the nesting bird species.

Activities to protect or restore wetland habitat in Moriches Bay, consistent with best management practices, (including the restoration of historic tidal regime, planting of native vegetation, control of invasive species, etc.) may enhance habitat values for fish and wildlife species.

Any permanent alteration or human disturbance of the seal haulout area, or obstruction of seal migrations would adversely affect this species. Significant underwater noise, from dredging or other underwater activities, may also preclude harbor seals from using the area.

HABITAT IMPAIRMENT TEST:

A **habitat impairment test** must be applied to any activity that is subject to consistency review under federal and State laws, or under applicable local laws contained in an approved local waterfront revitalization program. If the proposed action is subject to consistency review, then the habitat protection policy applies, whether the proposed action is to occur within or outside the designated area.

The specific **habitat impairment test** is as follows.

> In order to protect and preserve a significant habitat, land and water uses or development shall not be undertaken if such actions would:
>
> - destroy the habitat; or,
>
> - significantly impair the viability of a habitat.

Habitat destruction is defined as the loss of fish or wildlife use through direct physical alteration, disturbance, or pollution of a designated area or through the indirect effects of these actions on a designated area. Habitat destruction may be indicated by changes in vegetation, substrate, or hydrology, or increases in runoff, erosion, sedimentation, or pollutants.

Significant impairment is defined as reduction in vital resources (e.g., food, shelter, living space) or change in environmental conditions (e.g., temperature, substrate, salinity) beyond the tolerance range of an organism. Indicators of a significantly impaired habitat focus on ecological alterations and may include but are not limited to reduced carrying capacity, changes in community structure (food chain relationships, species diversity), reduced productivity and/or increased incidence of disease and mortality.

The *tolerance range* of an organism is not defined as the physiological range of conditions beyond which a species will not survive at all, but as the ecological range of conditions that supports the species population or has the potential to support a restored population, where practical. Either the loss of individuals through an increase in emigration or an increase in death rate indicates that the tolerance

range of an organism has been exceeded. An abrupt increase in death rate may occur as an environmental factor falls beyond a tolerance limit (a range has both upper and lower limits). Many environmental factors, however, do not have a sharply defined tolerance limit, but produce increasing emigration or death rates with increasing departure from conditions that are optimal for the species.

The range of parameters which should be considered in applying the habitat impairment test include but are not limited to the following:

1. physical parameters such as living space, circulation, flushing rates, tidal amplitude, turbidity, water temperature, depth (including loss of littoral zone), morphology, substrate type, vegetation, structure, erosion and sedimentation rates;

2. biological parameters such as community structure, food chain relationships, species diversity, predator/prey relationships, population size, mortality rates, reproductive rates, meristic features, behavioral patterns and migratory patterns; and,

3. chemical parameters such as dissolved oxygen, carbon dioxide, acidity, dissolved solids, nutrients, organics, salinity, and pollutants (heavy metals, toxics and hazardous materials).

Although not comprehensive, examples of generic activities and impacts which could destroy or significantly impair the habitat are listed in the Impact Assessment section to assist in applying the habitat impairment test to a proposed activity.

KNOWLEDGEABLE CONTACTS:

New York State Department of State
Division of Coastal Resources
Habitat Unit
99 Washington Avenue
Albany, NY 12231
Phone: (518) 474-6000

NYSDEC - Region 1
State University of New York, Building 40
Stony Brook, NY 11790
Phone: (631) 444-0204

NYSDEC
Bureau of Marine Resources
205 N. Belle Meade Road, Suite # 1
East Setauket, NY 11733
Phone: (631) 444-0430

NY Natural Heritage Program
625 Broadway, 5th Floor
Albany, NY 12233
Phone: (518) 402-8935

Department of Land Management
Town of Southampton
116 Hampton Road
Southampton, NY 11968
Phone: (631) 287-5710

Significant Coastal Fish and Wildlife Habitats

Moriches Bay (In Part)
part 1 of 3
Smith Point County Park (In Part)
Great South Bay -East (In Part)

New York State
Department of State

Division of
Coastal Resources

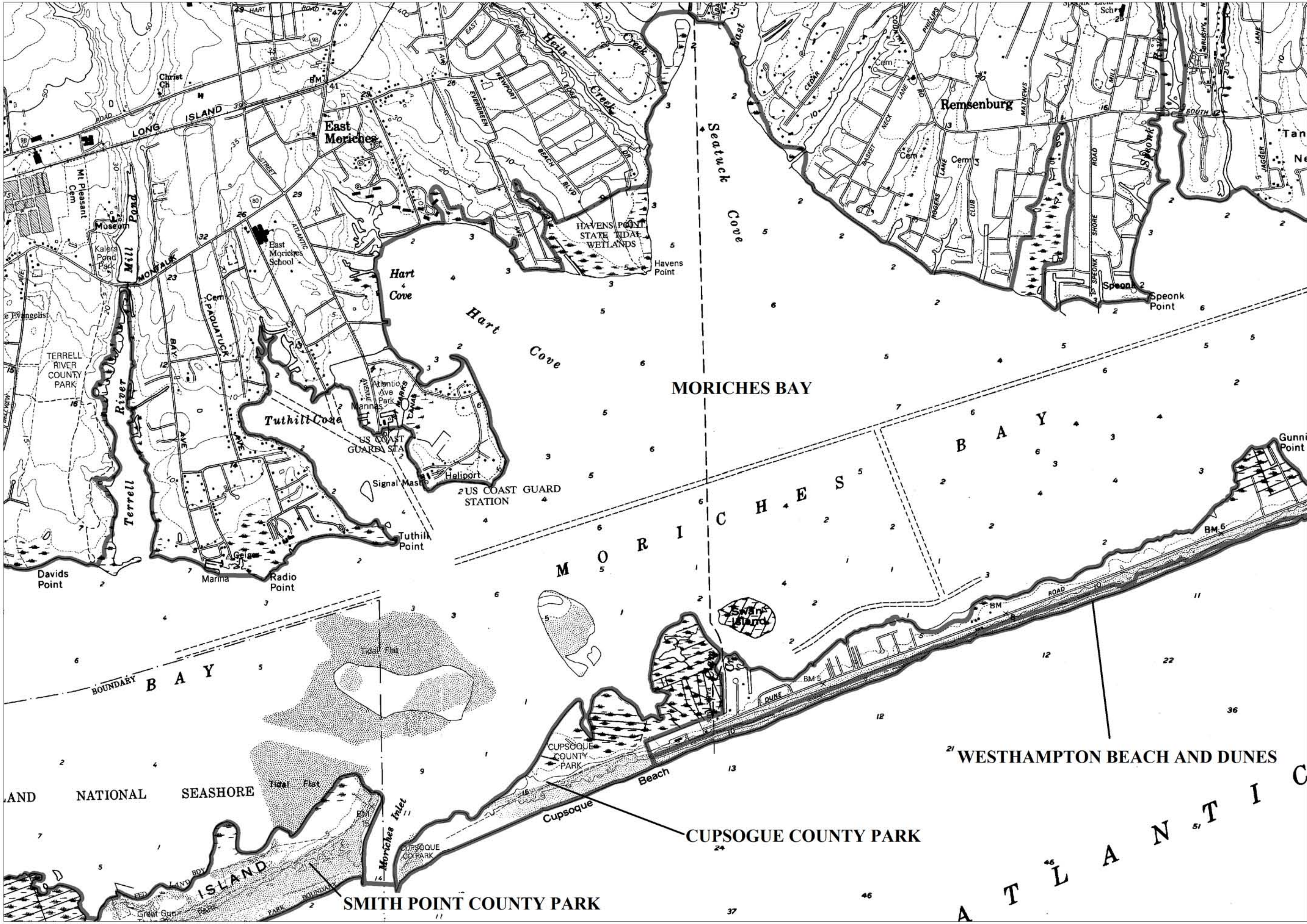
0 2000 feet

MORICHES BAY

SMITH POINT COUNTY PARK

GREAT SOUTH BAY -EAST

Contours, at 10-foot intervals, shown unrevised from 1967 U.S. Geological Survey map. Dashed lines represent 5-foot contours.



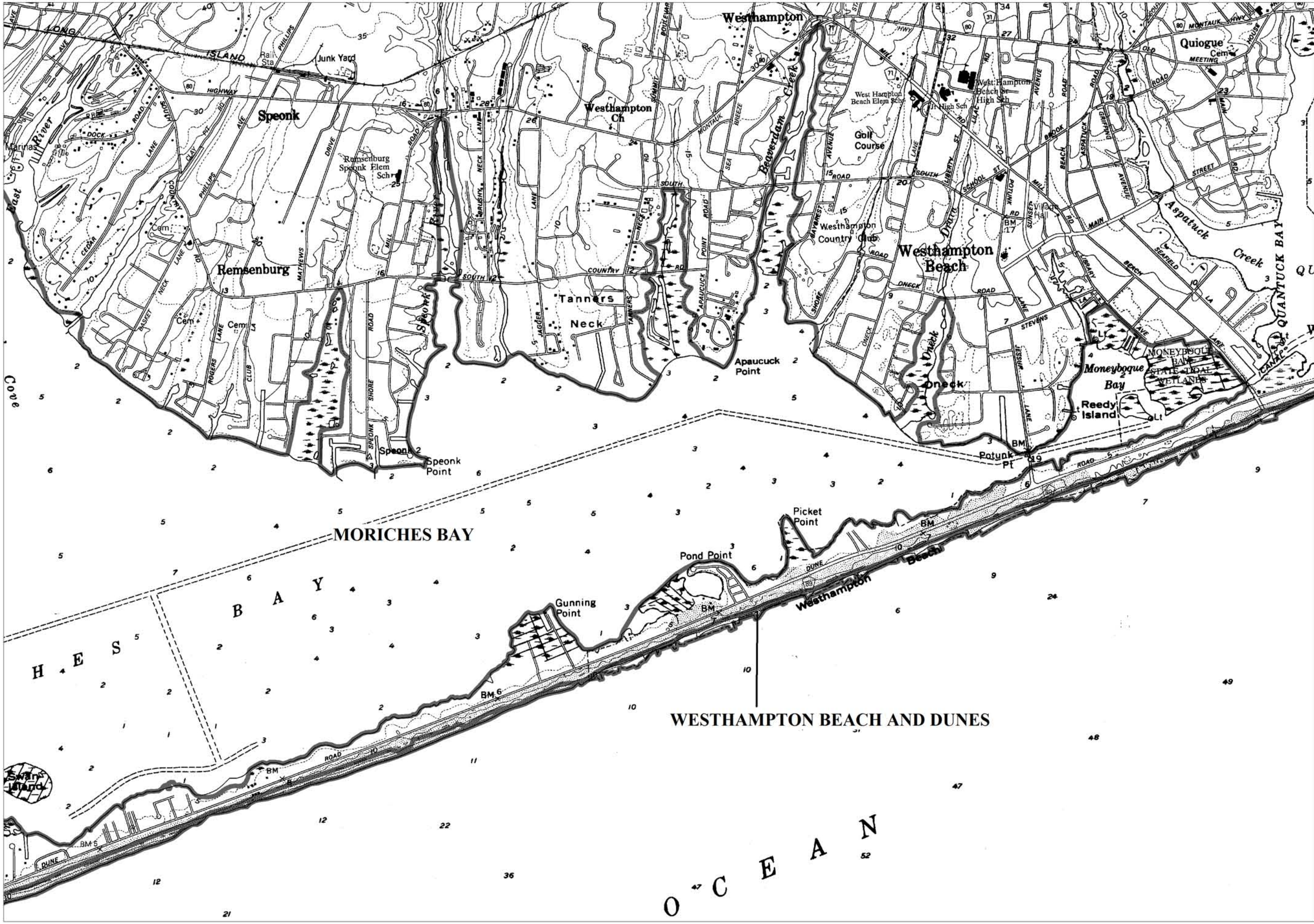
Significant Coastal Fish and Wildlife Habitats

Moriches Bay (In Part)
part 2 of 3

Cupsogue County Park
Smith Point County Park (In Part)
Westhampton Beach and Dunes (In Part)

New York State
Department of State

Division of
Coastal Resources



Significant Coastal Fish and Wildlife Habitats

Moriches Bay (In Part)
part 3 of 3
Westhampton Beach and Dunes (In Part)

New York State Department of State
Division of Coastal Resources

Appendix D-2
NYS Natural Heritage Program Correspondence

NELSON, POPE & VOORHIS, LLC
ENVIRONMENTAL · PLANNING · CONSULTING

March 28, 2013

Jean Petrusiak, Director
New York State Department of Environmental Conservation
Information Services
New York Natural Heritage Program
625 Broadway, 5th floor
Albany, NY 12233-4757

Re: Request for Natural Heritage Program File Review to aid in the preparation of an Environmental Impact Statement for the adoption of zoning code for the Village of Mastic Beach located in Suffolk County, New York (NP&V #13017).

Dear Ms. Petrusiak:

My firm has been retained by the Village of Mastic Beach to prepare an Environmental Impact Statement for the newly formed Village's proposed zoning code. The Village is located in the Town of Brookhaven, Suffolk County. It would be beneficial to consult the Natural Heritage Program files for any information you may have regarding unique habitats, and/or species of vegetation and wildlife. Enclosed is a portion of the Moriches, Bellport, Pattersquash Island and Howell's Point 7.5 minute quadrangles indicating the approximate boundary of the study area. A GIS shapefile of the Village boundary can be sent to your office upon request. Please provide any information you may have on this specific site or other unique ecological features within the vicinity. Your attention to this request would be greatly appreciated. Please do not hesitate to call if you have any questions regarding this correspondence.

Sincerely,

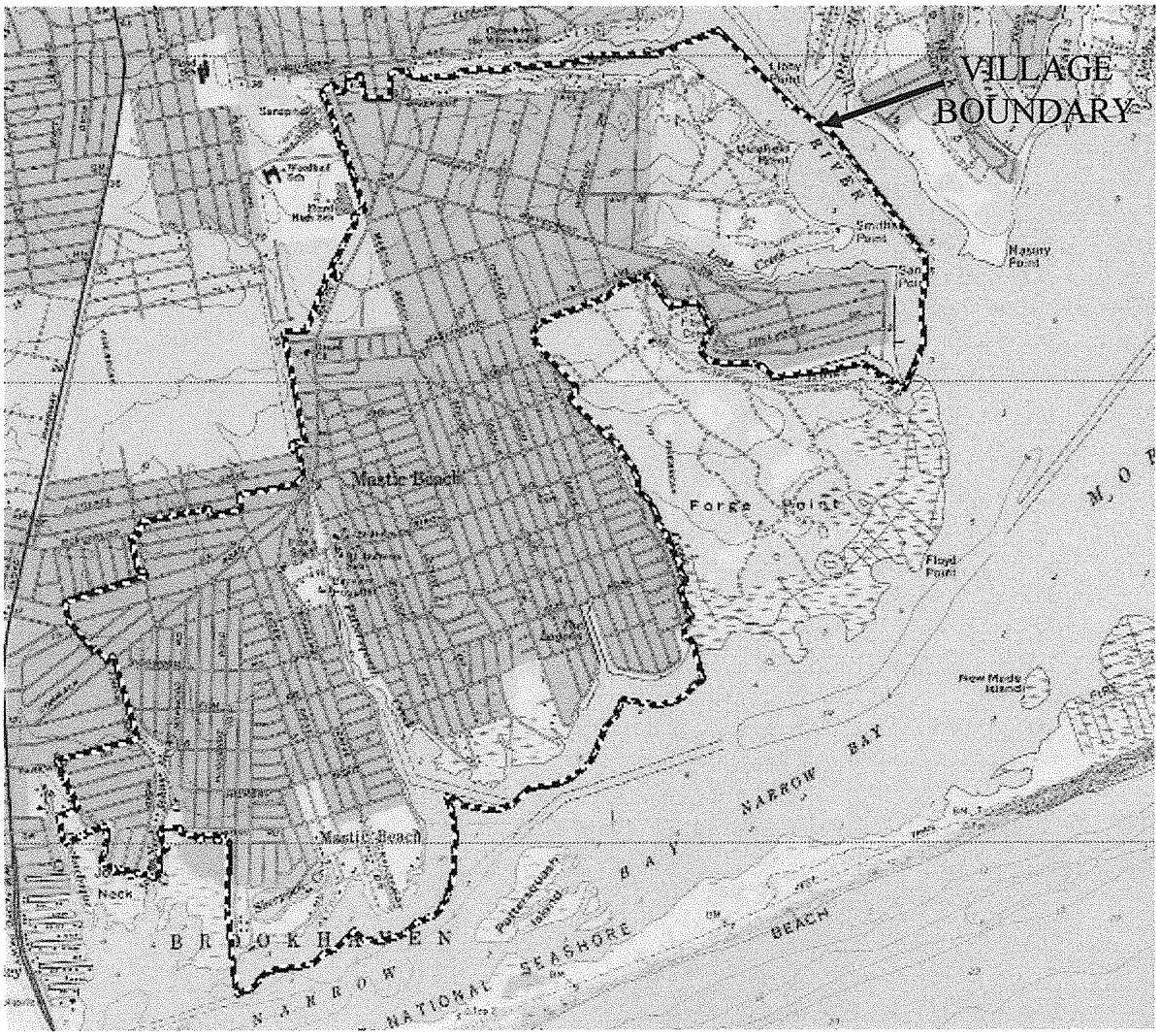
NELSON, POPE & VOORHIS, LLC

Lara Pomi-Urbat
Environmental Scientist

Enc.: location map

572 WALT WHITMAN ROAD, MELVILLE, NY 11747 - 2188
(631) 427-5665 FAX (631) 427-5620 WWW.NELSONPOPE.COM

USGS TOPOGRAPHIC MAP
MORICHES, BELLPORT, PATTERSQUASH ISLAND AND HOWELL'S POINT QUADRANGLES



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Fish, Wildlife & Marine Resources
New York Natural Heritage Program
625 Broadway, 5th Floor, Albany, New York 12233-4757
Phone: (518) 402-8935 • **Fax:** (518) 402-8925
Website: www.dec.ny.gov

Joe Martens
Commissioner

April 5, 2013

Lara Pomi-Urbat
Environmental Scientist
Nelson, Pope & Voorhis, LLC
572 Walt Whitman Road
Melville, NY 11747

Dear Ms. Pomi-Urbat:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the Village of Mastic Beach, located in Suffolk County, New York.

The only record from the Village of Mastic Beach is saltmarsh aster (*Symphyotrichum subulatum* var. *subulatum*, state-listed as Threatened), found in 2011 along Johns Neck Creek near Forest Road West. The site is heavily disturbed by human activity and invasive species. More information about the saltmarsh aster can be found in the online Natural Heritage Conservation Guide at www.acris.nynhp.org/guide.php?id=8749.

State-listed plants and animals have been documented outside of, but near, the Village of Mastic Beach in tidal salt marshes at Forge Point on the Fire Island National Seashore, Smith Point County Park North, and Pattersquash Island in Narrow Bay.

For many sites, comprehensive field surveys have not been conducted; the above information only includes records from our databases. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. This information should not be substituted for on-site surveys.

Sincerely,

Nick Conrad

Nicholas Conrad
Information Resource Coordinator
New York Natural Heritage Program